Voluntary Cleanup Plan for the CMC East Main Depot Facility

ADDENDUM

Prepared for:

City of Bozeman

20 East Olive Street Bozeman, MT 59711 (406) 582-2280

Prepared by:

Tetra Tech

303 Irene Street Helena, MT 59601 (406) 443-5210 Fax (406) 449-3729 Tetra Tech Project No. 115-7720035.300

December 15, 2008

TABLE OF CONTENTS

.0 INTRODUCTION	1
2.0 BACKGROUND	3
3.0 PROPOSED CLEANUP PLAN	4
3.1 Observed Asbestos Ore Areas	4
3.1.1 Remediation Plan for Observed Asbestos Ore	4
3.1.2 Confirmation Sampling	5
3.1.2.1 Remediaton Excavation Areas	5
3.1.2.2 Trench Walls Adjacent to Existing Structures	6
3.1.3 Estimated Haul Volumes	7
3.1.4 Excavation and Backfill	7
3.1.5 Environmental Requirements, Criteria or Limitations Analysis	7
3.1.6 Health and Safety Plan	8
3.1.7 Minimization of Short Term Disturbances	8
3.2 Potential Asbestos Ore Areas	8
3.2.1 Potential Asbestos Ore Area Investingation Plan	9
3.2.1.1 Wallace Avenue Investigation Plan	9
3.2.1.2 Visual and Grid Sampling Investigation Plan	10
3.2.2 Remedation Plan Potential Asbestos Ore Areas	11
3.2.3 Operations & Maintenance Plan	11
3.2.4 Remediation Plans and Alternatives Evaluation	14
3.2.4.1 Protective Measures for Wallace Avenue Plan and Evaluation	15
3.2.4.2 Institutional Controls Plan and Evaluation	17
3.2.4.3 Combination Alternatives Plan and Evaluation	20
3.2.4.4 No Action Plan and Evaluation	21
4.0 PERMITS	22
5.0 CONTINGENCY PLAN	
6.0 CONCLUSIONS	_
7.0 REFERENCES	
	23

LIST OF TABLES

Table 1 Alternative Evaluation for Protective Measures for Wallance Street Plan	14
Table 2 Alternative Evaluation for Institutional Controls Plan	16
Table 3 Alternative Evaluation for O&M Plan	19
Table 4 Alternative Evaluation for Combined Plan.	23
Table 5 Alternative Evaluation for No Action	24

LIST OF FIGURES

igure 1	Existing Conditions Map
igure 2	Observed and Potential Asbestos Ore Map
Figure 3	Reclamation Plan
igure 4	Staged Work Zone
igure 5	Potential Asbestos Ore Area investigation Plan – Wallace Avenue
igure 6	Wallace Avenue Protective Measures Map
igure 7	Visual and Grid Sample Locations
Figure 8	Schedule

LIST OF APPENDICES

Appendix A: Excerpts from the 2002 VCP

Appendix B: Excerpts of previous Sample Locations and Test Results

Appendix C: Access Agreements Appendix D: Contingency Plan Appendix E: Cost Analysis

Appendix F: Resolution No. ##, Deed Restrictions and City Cut Permit Application

1.0 INTRODUCTION

This is an addendum to the Montana Department of Environmental Quality (DEQ) - approved October 2002 Voluntary Cleanup Plan (VCP) for the CMC East Main Depot. The 2002 VCP addressed a 5-acre City-owned portion of the Facility known as the CMC East Main Depot property. The CMC Asbestos Facility is listed as a medium priority site under the Comprehensive Environmental Cleanup and Responsibility Act (CECRA) by DEQ. A remediation project was conducted at the CMC Asbestos Facility and competed in October 2003, during which time additional asbestos ore containing material was discovered off the five acre Facility which is the subject of this addendum and herein after referred to as the Facility. The 2002 VCP CMC Asbestos Facility is shown on Figure 4.2 of the 2002 VCP in **Appendix A**. The Facility includes private property along the east side of Wallace Avenue, Wallace Avenue from Main Street to Curtiss Street, Heeb's Grocery Store property, and the privately-owned alley to the south of Heeb's Grocery Store between Wallace and Church Street. The Facility is shown on **Figure 1** - Existing Conditions Map.

The legal description of this addendum of the VCP consists of the following property descriptions as documented from the State of Montana Cadastral Mapping Program (www.qis.mt.gov):

- ROUSES 1ST BOZ SEC 7 2S 6E APPROX. SOUTH 12 FT OF LOTS 1-14 BLK B AND APPROX. NORTH 12 FT OF LOTS 15-28 BLK B; (Alley)
- AMEND ROUSES 1ST BOZ NE4 SEC 7 2S 6E .530AC APPROX. WEST 38 FT OF LOT 1A-1; (Parking Area Of N Portion of EBM North Warehouse)
- PT OF BLK C ROUSES 1ST BOZ & PT OF BLK B ROUSES 2ND BOZ PLUS POR VAC ALLEY & BABCOCK ST; (S Portion of EBM North Warehouse)
- ROUSES 2ND BOZEMAN SE4 7 2S 6E .236AC TR BEING COS 361; (EBM South Warehouse)
- ROUSES 2ND BOZ SE4 SEC 7 2S 6E .479 AC LOT 1 BLK C; (Harrington's Inc.)
- ROUSES 2ND BOZ AMND SE4 SEC 7 2S 6E .371AC LOT A BLK C & F; (Story Distributing Co.) and,
- CITY OF BOZEMAN WALLACE AVENUE RIGHT-OF-WAY FROM EAST MAIN STREET TO APPROX. 16 FT SOUTH OF CURTISS STREET RIGHT-OF-WAY.
- Heeb's Grocery Store and Parking Lot: ROUSES 1ST BOZ SEC 7 2S 6E LOT 9-14 BLK
- A portion of MDT ROW at the intersection of Wallace Street and Main Street

This addendum presents a modification to proposed alternative (Alternative 2-Excavation, Treatment of Lead Waste and Off Site Disposal) in the VCP to prevent exposure to observed and Potential Asbestos Ore areas, as defined by this addendum, at the Facility. This addendum includes a Remediation Plan for Observed Asbestos Ore in accessible areas and a Potential Asbestos Ore Area Investigation Plan and Combined Protective Plan for areas of Potential Asbestos Ore and inaccessible Observed Asbestos Ore. Inaccessible areas are those areas under buildings, under Wallace Avenue and other specified paved areas. The Combined Protective Plan includes preventive measures, operations and maintenance and institutional controls plans. The Combined Protective Plan will remain in place at the Facility until a final confirmation sampling plan is completed and confirmed asbestos ore remediated or the presence of asbestos ore is confirmed not to exist. This addendum addresses only areas

subject to modification from the VCP. All relevant sections of the VCP not expressly referenced or modified by this addendum remain part of this addendum as defined in the VCP.

2.0 BACKGROUND

Additional investigation of specific areas in the Facility was requested by the DEQ in a letter to the City dated November 22, 2006 for CMC Asbestos Bozeman CECRA, Statutory Notice to the City of Bozeman. Tetra Tech prepared a Supplemental Investigation (SI) Work Plan which was approved by the DEQ on December 6, 2007. The SI Work Plan was implemented in December of 2007 and a revised SI Report was submitted to DEQ on June 20, 2008. The SI report describes the locations of additional contaminated soils discovered at the Facility.

Figure 1 – Existing Conditions Map shows the location of asbestos ore-containing test pits as referenced from the SI, VCP, Revision 1 - Addendum to the VCP (2003) and Additional Asbestos Investigation (2005). Excerpts from these reports showing the locations of the samples and the results are included in **Appendix B**.

The asbestos ore containing testing pits shown on **Figure 1** are based on visual observations of pieces of asbestos ore either on the surface of the ground near the pit location, in the pit walls, on in the excavated test pit material. The test pit sampling was taken from the pits to confirm that the soil at the bottom of the pits did not contain visible asbestos ore and did not contain a detectable concentration of asbestos ore. The results of these samples show non-detection for asbestos ore.

The existing uses of the properties within the Facility are as follows:

- Story Distributing vacant lot
- Empire Building Materials building material warehouse and distribution center
- Heeb's Grocery Store grocery store
- Harrington Building warehouse, retail stores and office

The future use of the building sites and right-of-way described in this report is expected to continue in their current use. No future use plan changes are known. The areas north of Babcock are zoned for business and the area south of Babcock and east of South Wallace are zoned residential. The area south of the alley between Babcock and East Olive and west of South Wallace is also zoned residential. Any future use of the properties is expected to conform to City zoning. The City may elect to pave the alley between Wallace and Church Street at some point after remediation is completed. The City has no foreseeable plans to reconstruct, repave or replace the utilities in Wallace Avenue.

3.0 PROPOSED CLEANUP PLAN

The proposed cleanup plan covers two area classifications at the Facility, Observed Asbestos Ore and Potential Asbestos Ore. The Proposed Cleanup Plan is for remediation of the accessible Observed Asbestos Ore Areas. The proposed plan for the Potential Asbestos Ore area includes a Potential Asbestos Ore Area Investigation Plan and a Combination Plan which includes a Protective Measures Plan, an Institutional Controls Plan and an Operations and Maintenance Plan.

The Observed and Potential Asbestos Ore Areas are shown on **Figure 2**. Potential Asbestos Ore Areas are those areas where the presence of asbestos ore has not been confirmed, but where there are reasons to assume asbestos ore contamination may be present. Asbestos ore is assumed to potentially exist in these areas due to proximity to historical Facility operations, proximity to Observed Asbestos Ore, and based on historical records documenting street and building construction dates. Observed Asbestos Ore Areas are those areas where visual asbestos ore was documented during previous investigations and remediation. The proposed Observed Asbestos Ore Remediation Plan is discussed in Section 3.1 and the Potential Asbestos Ore Plans are discussed in Section 3.2.

3.1 OBSERVED ASBESTOS ORE

Asbestos ore was observed in the following areas as shown on Figure 2:

- East of the South Harrington Building (SHB) and beneath the loading dock east of the North Harrington Building (NHB) (Tetra Tech 2008) and (RTI 2003);
- West of and adjacent to the North Empire Building Materials Warehouse including aerial photography dating construction after operation of the Facility commenced (RTI 2003)
- South of the SHB, on property owned by Harrington's, Inc. (Harrington's) and Story Distributing (Story) (Tetra Tech 2008);
- In the alley and driveways south of Heeb's Grocery (Heeb's) (Tetra Tech 2008);
- Vacated portion of Olive Street north of the North Harrington Building (NHB) (RTI 2004)
- The east and south walls of the utility conduit remediation excavation (RTI 2003)
- Parking lot of Empire Building Materials (EBM) adjacent to Wallace ROW. (RTI 2004).
- West of the South EBM Building (RTI 2002 and 2003)
- South EBM building and ramp (RTI 2004)
- Southwest corner of Wallace and Main intersection, extending west beneath the sidewalk and south beneath the Heeb's Grocery parking lot (MDT 2007)

3.1.1 Remediation Plan for Observed Asbestos Ore

The Remediation Plan for Observed Asbestos Ore is a modification of Alternative 2 – Excavation, Treatment of Lead Waste and Off Site Disposal in the VCP. Alternative 2 includes the excavation of asbestos ore containing material for disposal in the Bozeman Landfill. This Plan was selected based on the Section 5.5 – Remedial Alternatives Comparison in the VCP. The Remediation Plan for Observed Asbestos Ore will be conducted in accordance with the asbestos ore specific measures set forth in Section 5.0 to 5.9 of the approved VCP (RTI 2002). The City will excavate asbestos ore contaminated soil based on the compiled information for Observed Asbestos Ore as shown on **Figure 1** and **2**. **Potential and Observed asbestos will**

be removed from all accessible areas outside the Wallace Street right-of-way and the accessible area of Wallace Street right-of-way along the east side between the curb and gutter and east right-of-way line, also know as the conduit trench. All areas of Observed Asbestos Ore where excavation does not take place will be addressed as per Section 3.2 of this Addendum. Buildings shown on Figure 2 as Observed Asbestos Ore will have deed restrictions placed on the properties. These building include the South Harrington, the Empire Building Materials North and South Warehouses and the concrete loading dock east of the North Harrington buildings. Additionally, other properties along the alley between Wallace and Church Avenue might require the placement of a deed restriction, depending upon the results of the excavation and investigation. The buildings and loading docks are classified as Observed or Potential Asbestos Ore because ore was either visually observed directly adjacent to the foundations and footings, or aerial photography shows construction of the buildings after the historic asbestos milling and storage lease operation at the 200 block of South Wallace Avenue. (RTI 2003 and Tetra Tech 2008).

3.1.2 Confirmation Sampling Plan

The confirmation sampling plan will be conducted in the Observed Asbestos Ore areas and accessible potential asbestos ore area that are reclassified as Observed Asbestos Ore through the visual and grid sampling plan. Confirmation samples will only be collected in excavations where no visual asbestos can be found. Confirmation samples will be collected in accessible areas to demonstrate removal of asbestos ore, or to confirm the location of remaining contamination to be left in place. Samples will be collected only from areas where additional excavation is not anticipated (i.e. from areas where asbestos ore is no longer observed, or at the end of the excavation next to areas where soil is not readily accessible, such as the trench wall adjacent to existing structures). The confirmation sampling plan includes sampling at the limit of the remediation excavations areas and in the trench walls adjacent to existing structures. The sampling at the limit of the remediation excavations will be performed to evaluate for the potential of asbestos ore to exist or not exist at the limit of the excavation. The sampling in the trench walls adjacent to existing structures will be performed to evaluate the potential for asbestos ore material to exist under structures or pavement. Sampling beyond the limit of excavation of observed ore into the potential ore areas is part of the Visual and Grid Sampling Plan in Section 3.2.1.2 of the Potential Asbestos Ore Area Investigation Plan discussed in Section 3.2.1.

3.1.2.1 Remediation Excavation Areas

Asbestos ore containing material in all of the accessible Observed Asbestos Ore Areas will be excavated and transported for disposal in the Bozeman Landfill. These excavations will continue in accessible areas until no further asbestos ore containing material is visually observed in the trench wall or excavated material. At this limit, a 5-point composite sample will be collected from the base of each 25-ft by 25-ft grid of each excavation and from every 100 linear feet of the excavation walls. For areas smaller than 25-ft by 25-ft grid, one composite sample must be collected from the excavation walls and a second composite sample must be collected from the base of the excavation.

The area under buildings and pavement is considered inaccessible; however, the asphalt parking lot for the North and South Harrington Buildings is proposed to be removed. The asphalt parking lot for the North and South Harrington Building is being removed because contamination in the utility conduit directly north of the parking lot was observed to continue

south under the parking lot. Additionally, based on dated aerial photos, the lot was unpaved during historic asbestos milling and storage lease operation at the 200 block of South Wallace Avenue and it is directly adjacent to the operation in the North Harrington Building. Remediation of the conduit under the North and South Harrington parking lot will be conducted in the same manner as in the DEQ-approved September and October, 2003 addenda to the VCP. Removal of the paving will allow removal of asbestos which will protect the health and safety of the utility workers.

The visual observation examination of the soil will be conducted along excavation walls beneath the existing structures and at the base of the excavation. The visual examination will be made in accordance with the visual asbestos ore identification methodology referenced in the Supplemental Investigation Work Plan (Tetra Tech 2007) to ensure all asbestos ore has been removed. This visual method is American Standard for Testing and Materials (ASTM) Method E 1386-05: Standard Practice for Visual Inspection of Asbestos Abatement Projects. Sample collection, analysis, and quality control methods will be conducted as specified in the Supplemental Investigation Work Plan except as noted in this VCP Addendum (Tetra Tech, 2007). All sample locations will be documented using Global Positioning System (GPS) and by measurements in reference to existing structures (as necessary). The samples will be sent to a laboratory for 24-hour turn-around testing using the California Air Resource Board (CARB) Method 435 to refine the samples followed by using Polarized Light Microscopy (PLM) (EPA Method 600/R-93/116 with its stipulated 400 Point Count analysis to acquire a limit of detection of 0.25%. The CARB Method 435 will included modifications made by the EPA to include a visual estimation of conducting point count and a "field of view report" of asbestos structures as specified in the September 2008 EPA Framework for Investigating Asbestos-Contaminated Superfund Sites (page C-6). Instructions to the lab will include the aforementioned EPA modifications when directing the lab to conduct analysis of soil samples under this addendum. QA/QC samples will be collected as specified in the Supplemental Investigation Work Plan (Tetra Tech, 2007) for 10% of the collected samples as previously indicated herein. The excavation will remain open, but secured during the testing time and excavation will continue if the asbestos material content is 1% or greater. If the results of the testing are less than 1% asbestos and no visible asbestos ore is present then the excavation will be backfilled with imported clean fill to the existing ground elevations. Excavation areas may continue into Potential Asbestos Ore Areas as shown on Figure 2. Excavation will continue until all accessible asbestos ore contamination encountered in Observed or Potential Asbestos Ore areas is no longer visible and test results are less than 1%. If contamination is encountered outside the facility, the City will consult the DEQ regarding what appropriate remedial action will be taken under the conditions present. If excavation ceases prior to complete removal of asbestos ore contamination, the property will be addressed through the institutional control measures specified in Section 3.2.4.2 of the Addendum. The access agreements for individual property owners which are included in this Remediation Plan for Observed Asbestos Ore are included in **Appendix C**. During excavation, if additional asbestos ore appears to cross property boundaries where no access agreement has been signed, work will stop in that area until a signed access agreement has been executed.

3.1.2.2 Trench Walls Adjacent to Existing Structures

Visual observations and a five point composite grab sample will be collected from the trench walls adjacent to all existing structures. The 5-point composite sample will be collected for every 25 linear feet along the excavation wall adjacent to the buildings. The visual observations will be conducted as described in Section 3.1.2.1. If visual asbestos ore is present or sample

results indicate the presence of asbestos greater than or equal to 1% in soils beneath the building, the existing contamination will be addressed through the institutional control measures specified in Section 3.2.4.2 of this Addendum.

Asbestos ore contamination noted beneath the structures will be encapsulated and documented in the construction completion report. Excavation along the trench walls adjacent to structures will be designed to provide stability to the existing structures. Excavations entail sloping from the bottom of the footing to the bottom of the excavation at a maximum slope 2h:1v. The remaining slope will be encapsulated by placing a 2-inch layer of concrete (poured in-place or shotcrete) along the face of the excavation adjacent to the building where Observed Asbestos Ore will remain in-place. This method is different than the 2002 VCP but meets the same alternative analysis criteria as emulsified asphalt used in the 2002 VCP. The concrete is protective of human health and safety by providing an impermeable layer through which asbestos can not migrate and a physical barrier to identify when future excavation should terminate. This method is different than the method in the 2002 VCP because the asbestos being encapsulated is in fill material rather than bonded to a concrete surface as in the conduit area of the 2002 VCP. The excavation will be staggered and conducted on a cell by cell basis. A "cell" is defined as an 8-foot length of trench wall parallel to the building footing by 6-foot width measured perpendicular to the building. Excavation depth will be evaluated through visual inspection and confirmation sampling. A visual examination of the soil will be conducted along excavation walls beneath the existing structures and at the base of the excavation. The visual examination will be made in accordance with the visual asbestos ore identification methodology referenced in the SI Work Plan. Asbestos ore contamination noted beneath the structures will be documented prior to encapsulation and the information will be included as part of the institutional controls and the construction completion report. With the exception of inaccessible asbestos ore, asbestos ore that is observed and documented beneath existing structures and upon which an institutional control will be placed, all visible accessible asbestos ore in the area specified will be excavated.

3.1.3 Estimated Haul Volumes

A tabulation of estimated quantities was prepared for remediation of accessible Potential and Observed Asbestos Ore. This tabulation includes estimates of in-place asbestos ore material. This estimated quantity assumes that all the accessible areas of Observed and Potential Asbestos Ore (**Figure 2**) outside the building footprints and the Wallace Avenue from the east curb-line to the west right-of-way will be excavated to a depth of 3-ft. The estimated material quantities will change based on actual field conditions and the results of the Confirmation Sampling Plan. All quantities will be measured on-site during construction by the City or their designated representative. The total estimated in-place quantity of asbestos ore material to be removed is approximately 4,000 cubic yards. Some swelling of the material is expected during excavation and placement in the Class II Bozeman landfill; however, since the cost of disposal is based on weight of material, swelling will not affect the cost of disposal. The haul route is shown on Figure 4 in the Contingency Plan included with this addendum in **Appendix D**.

3.1.4 Excavation and Backfill

Sources of backfill material will be identified and suitable information will be reported to DEQ prior to their use as to demonstrate that contaminants are not present in the fill at concentrations above cleanup levels for the Facility. Backfill will be provided by a MDEQ licensed gravel

source. The name and location of any backfill provider will be submitted to DEQ along with soil sample results for review and approval prior to backfilling of the excavations.

Excavations are planned to remove asbestos ore along existing buildings. These excavations will be performed and, if necessary, engineered to provide stability to the existing structures during contaminated soil removal. This might entail providing a stable slope for the excavation from the base of each existing concrete footing to the base of the excavation. To prevent fiber release during construction, water will be used to moisture condition the soil for dust control. To prevent future fiber release for asbestos ore material left in place, a cap will be place over the slope and buried in-place. The cap will consist of a 2-inch layer of concrete or a DEQ approved equivalent method. Providing a permanent cap over the excavated asbestos ore left in-place will protect the public and provide a visual and physical limit when further removals or excavations are conducted in the area. After placement of the cap, the excavation will be backfilled; and topsoiled and seeded or paved. The final reclaimed surface will be the same as the currently existing condition prior to remediation. The reclaimed surfaces are shown on Figure 3 – Reclamation Plan. The reclaimed surfaces are identical to the reclamation material included in the 2002 VCP and include asphalt, concrete, sod, permanent seed and gravel backfill surfaces. Following is a list of the properties followed by the reclaimed surface material. Story Distributing Property – permanent seed

Areas east of the South Harrington building – permanent seed Conduit Trench between the fence and Wallace Street Curb and Gutter from East Main Street to the southern edge of EMB South Warehouse, excluding the entrance drives – permanent seed Harrington Building – asphalt Empire Building Materials – gravel Alley between Wallace and Church – gravel

3.1.5 Environmental Requirements, Criteria, or Limitations Analysis

The Remediation Plan for the Observed Asbestos Ore has been discussed and previously reviewed and approved by DEQ and can be found in Appendix F of the VCP. The previous analysis of environmental requirements, criteria or limitations contained within the VCP was conducted pursuant to §§ 75-10-721(2) (a) and (b), MCA, and applicable to this proposed addendum to the VCP. The Human Environmental Exposure Assessment, Section 4.8 of the 2002 VCP applies directly to this addendum with regard to asbestos ore. Short term disturbances will be minimized through the use of best management practices as discussed below in Section 3.1.7. These management practices will meet the environmental requirements, criteria or limitations and will be conducted in an identical manner to the practices identified in the 2002 VCP.

3.1.6 Health and Safety Plan

A CMC Bozeman Facility-Specific Health and Safety Plan (HASP) will be developed for the Facility in accordance with the Occupational Safety and Health Administration (OSHA) Code of Federal Regulations (CFR) 1910.120 that will mirror the HASP developed for the 2002 VCP; however, the HASP will include site-specific updates. During the process of the excavation, the City will collect environmental/worker asbestos air samples in accordance with National Institute of Occupational Safety and Health (NIOSH) Method 7400, as well as, collecting negative

occupational exposure samples (per task) from the excavation remediation company to ensure environmental and occupational health and safety during excavation activities and in accordance with the HASP and Section 5.1.4 of the 2002 VCP. All applicable health and safety regulations will be met during the implementation of the Remediation Plan. Equipment used to excavate, load, or otherwise contact the asbestos ore will be decontaminated in a temporary decontamination area designed to contain the wastewater or wrapped and transported to the landfill for disposal. The method by which waste loading and decontamination will be conducted is identical to that approved in the 2002 VCP and subsequently approved addendums including the September 23, 2003 addendum. Any wastewater generated by decontamination will be controlled as indicated in Section 5.1.2.8 of the 2002 VCP.

3.1.7 Minimization of Short Term Disturbances

Short term disturbances will be managed as described in the 2002 VCP. Dust control will be suppressed and erosion will be controlled with Best Management Practices. Silt fence will be place around the site and check dams will be used where concentrated flows occur. If wastewater is collected and reused for equipment decontamination purposes, it will be filtered to the DEQ Asbestos Control Program's standard of 5 microns. Loading will occur within the fenced staging work zone and occur as the material is removed. Soil excavation and waste loadout, transport and handling procedures will follow specifications in Section 5.1.2.3 and 5.1.2.5 through 5.1.4.4 of the 2002 VCP.

The site is an active area of town with operating business and a primary transportation route through town. As a result, the site will be remediated in stages with only select areas (work zones) being closed at any one time. Closure of the work zones will be determined by the contractor and approved by the City. This is necessary to maintain operation of the businesses and traffic patterns by minimizing disruption. Access to the work zone is restricted to authorized personnel working for the City of Bozeman, Tetra Tech MM and subcontractors and emergency response personnel. The work zones will all contain the similar elements for protection of public and project personnel.

The work zones will be fenced with temporary (moveable) 6-foot high chain-link fence. The fence will be temporarily secured in-place around each work zone. The fence will be affixed with warning signs prohibiting entry by non-authorized persons posted. Access to the site will be limited to the gates. A conceptual staging work zone plan proposed for the project is shown on shown in **Figure 4** – Staged Work Zone.

3.2 POTENTIAL ASBESTOS ORE

Several areas are included within the Facility where there is a potential for asbestos ore to be present (Tetra Tech 2008; RTI 2002; RTI 2003; RTI 2004). These areas include accessible (gravel and vegetated surfaces) and inaccessible areas (beneath building structures or paved surfaces). Inaccessible areas identified as observed or Potential Asbestos Ore will have the institutional controls identified in Section 3.2.4.2 place on the property. These areas are depicted on **Figure 2** - Observed and Potential Asbestos Ore, and are described below:

- Wallace Avenue right-of-way from Main Street to Curtiss Street (RTI 2004; Tetra Tech 2008).
- Story Distributing Property (Tetra Tech 2008);

- Loading docks of the NHB (Tetra Tech 2008);
- North EBM Warehouse (RTI 2002);
- NHB Loading Dock (RTI, 2002)
- West half of the alley between Wallace and Church (Tetra Tech 2008);
- Heeb's Grocery Store and parking lot); and,
- Portions of driveway along the Alley (Tetra Tech 2008)

These areas are identified as Potential Asbestos Ore based on the following:

- Their close proximity to the locations of Observed Asbestos Ore
- Observed Asbestos Ore was found surrounding the areas
- The areas are of similar composition to the areas where Observed Asbestos Ore was documented (i.e. similar gravel parking areas within the same property, similar gravel alley material between main streets)
- Wallace Avenue was unpaved during the time CMC Bozeman operated
- Historical aerial photography documentation of building construction
- Undocumented observed asbestos ore was found by Tetra Tech during 2008 site visits in the alley, Story property and the EBM and Harrington parking lots.

3.2.1 Potential Asbestos Ore Area Investigation Plan

A Potential Asbestos Ore Area Investigation Plan was prepared for the Potential Asbestos Ore areas. The proposed plan includes test pits in Wallace Avenue and visual and grid sampling for the remaining Potential Asbestos Ore areas. The test pit locations area shown on **Figure 5** - Potential Asbestos Ore Area Investigation Plan. Sample collection, analysis, and quality control methods will be conducted as specified in by this document and per the Supplemental Investigation Work Plan (Tetra Tech 2007).

3.2.1.1 Wallace Avenue Investigation Plan

The purpose of the Wallace Avenue portion of the Potential Asbestos Ore Area Investigation Plan is to gain a better understanding of the absence or presence of asbestos ore in the subgrade material and utility trench backfill until a complete assessment can be conducted. This plan is for the area from the west right-of-way to the east curbline of Wallace Avenue. Investigation of the conduit area will be conducted as described in the Visual and Grid Sampling Plan, Section 3.2.1.2. The reason for this is that the area associated with the conduit is accessible, the Visual and Grid Sampling Investigation Plan is more comprehensive and because observed asbestos ore was found in the conduit trench as part of the 2002 VCP. Based on the information provided by this investigation, Wallace Avenue will either remain classified as Potential Asbestos Ore or be reclassified as Observed Asbestos Ore. All areas reclassified as Observed Asbestos Ore will be sealed by an asphalt overlay as indicated in Section 3.2.4.1 - Protective Measures for Wallace Street Plan. If no asbestos ore is found, Wallace Avenue will remain classified as Potential Asbestos Ore to alert utility and road workers to the potential for unidentified pockets of ore used as fill material to exist. Degraded areas of pavement will be removed and repaved.

Test pits will be excavated and visual observations and surface samples will be taken in the Wallace Avenue right-of-way to provide a preliminary assessment of the subgrade material.

Visual observation and surface sample will be conducted as described in the SI Work Plan. Surface sample will only be taken if no visually observable asbestos ore can be found. The test pits and surface samples will be conducted where the asphalt or concrete is degraded and proposed for removal and replacement as part of the Wallace Avenue Protective Measures Plan discussed in Section 3.2.4.1 and shown on **Figure 6**. The locations of the test pits are shown on **Figure 5**.

Test pits will be excavated as described in the SI Work Plan and excavated until there is no visual asbestos ore within the asphalt repair area shown on **Figure 6** and confirmation sampling is performed by laboratory testing conducted as described in the SI Work Plan or until the trench is unsafe for entry. Samples will be collected in accordance with the SI Work Plan. If the test pits result in visual observations of asbestos ore or laboratory testing results containing 1% or greater asbestos, then Wallace Avenue will be classified as Observed Asbestos Ore from Main Street to the test pit location. The location of the test pits, visual observations and samples will be documented. Any asbestos ore left in-place will be addressed through institutional controls.

In areas where degraded pavement or sidewalk is removed a visual inspection of surficial material below the sidewalk or pavement will be conducted. Five point composite samples will also be taken of the surficial material for each area measuring 100-sq.ft. or less. All sampling will be conducted using the analytical methodologies as referenced in the SI Work Plan and above in Section 3.1.2 – Confirmation Sampling and 3.1.2.1 – Remediation Excavation Areas.

3.2.1.2 Visual and Grid Sample Investigation Plan

A visual and grid sample inspection will be conducted at the beginning of project remediation for all accessible potential asbestos ore areas within the Facility. The purpose of the Visual and Grid Sample Investigation is to evaluate whether or not asbestos ore exists within the accessible areas identified as Potential Asbestos Ore areas. If the investigation finds asbestos ore, the grid location will be classified as Observed Asbestos Ore and remediated as described in Section 3.1 - Observed Asbestos Ore. Additionally, areas between Observed Asbestos Ore will be classified as Observed Asbestos Ore and remediated. Areas considered inaccessible are under under-buildings and pavement except for the North Harrington Building (NHB) Parking Lot. NHB parking lot will be removed and investigation of the subgrade material will be included with this part. The NHB parking lot will be repaved once investigation and remediation of all observed asbestos ore is completed. The right-of-way portion of Wallace Avenue is part of the Potential Asbestos Ore Area Investigation Plan discussed above.

The visual inspection will consist of walking a grid at 3ft on-center, each-way for the Potential Asbestos Ore areas. Any visual asbestos ore on the surface will be collected and the location noted per Section 3.1.2. The grid sampling will consist of three test pits, excavated to 3-ft below grade for each 1,000-sq.ft. within the Potential Asbestos Ore limits east of Wallace Avenue's east curb and gutter line. The locations of the grids for the composite samples are shown on **Figure 7** – Visual and Grid Sample Locations. Five point composite samples of the surface in each grid will be collected if no visual asbestos ore is observable throughout the entire test pit depth. The results of the visual and grid sampling inspection will be reviewed and a determination will be made with DEQ and the City of Bozeman regarding the classification of the Potential Asbestos Ore areas inspected by this method. If visual asbestos ore is encountered all observed asbestos will be excavated per Section 3.1.1 of the VCP Addendum until asbestos

is no longer visible and confirmation samples are collected. All test pit locations will be identified using GPS coordinates and the appropriate measurements in reference to existing structures will be taken. The sampling will be conducted in accordance with the SI Work Plan.

3.2.2 Remediation Plan for Potential Asbestos Ore Areas

The preferred Remediation Plan for Wallace Avenue and Potential Asbestos Ore areas (as shown in **Figure** 2) is a combination of the alternatives evaluated in Section 3.2.4. These Combined Alternatives include:

- Encapsulation of the utility conduit through previously approved methods (2002 VCP) and encapsulation of Wallace Avenue through the application of 2-inch mill 2ft wide from Main to Curtiss, placement of a structural geosynthetic over "low" deteriorated areas and installation of a 2-in asphalt overlay.
- Filling in cracks along sidewalks/curbs/gutters and driveways with asphalt tar;
- Removal and replacement of concrete sidewalks that have deteriorated significantly;
- Removal and replacement of pavement in moderate and highly degraded areas; and
- Institutional Controls measures including deed restrictions, a City Resolution, Geographic Information System (GIS) Mapping, and revisions to the City Street Cut Permit.

The specifics of these alternatives are discussed and evaluated in the Sections 3.2.4.1 through 3.2.4.3 below.

Some of the parking lots and drives in the Potential Asbestos Ore areas east of Wallace Avenue right-of-way may be remediated as part of the proposed Remediation Plan for Observed Asbestos Ore. The parking lots and drives are shown on **Figure 2** and identified as Potential Asbestos Ore areas. More specifically, these areas include the parking lots for Empire Building Materials and Harrington's buildings, and driveway off the alley behind Heeb's Grocery used to access the property at 549 Babcock. If asbestos ore contaminated soils are found in these areas during the remediation of the adjacent observed asbestos ore areas, they will be remediated as part of the Remediation Plan for Observed Asbestos Ore. These areas east of the Wallace Avenue right-of-way will be evaluated for remediation as part of the Visual and Grid Sampling Inspection discussed above in the Section 3.2.1.2. Also, inaccessible areas where asbestos ore contamination is observed but not excavated will be addressed through placement of an appropriate institutional control on the property.

3.2.3 Operations and Maintenance Plan

Because some Observed Asbestos Ore will be left in place and some areas of Potential Asbestos Ore will remain inaccessible, an Operations and Maintenance Plan (O&M Plan) will be necessary to protect the public's health, safety and welfare, and the environment. The Operation and Maintenance Plan will be implemented by the Public Service Department at the

City of Bozeman. The Public Service Department will use the necessary portion of their annual maintenance budget to pay for expenses associated with O&M Plan.

The City will manage the O&M Plan inspection, documentation and repair of Potential Asbestos Ore areas. The O&M Plan includes the following components:

- Annual inspection of paved areas and sidewalks in the Facility that may expand, shrink or heave during season changes.
- Inspections after major environmental events (e.g., earthquakes, flooding or major wind or rain storms).
- In areas where inspections report damage and asbestos ore has been observed, a DEQ-accredited asbestos abatement contractor/supervisor will be called for immediate emergency response; confirmation samples will be collected following removal; and an asbestos clearance will be required for any contained areas after the emergency response cleanup effort is completed. This is required by Title 17, Chapter 74, Subchapter 3 of the Administrative Rules of Montana.
- Inspectors of the Facility will be given an annual asbestos awareness training in accordance with Occupational Safety and Health Administration 29 Code of Federal Regulations (CFR) 1910.1001 provisions to become aware of the signs of this asbestos ore as well as limited structural assessment training to use to observe property for potential failures that could expose asbestos.
- Annual inspection forms will be developed and annual reports generated by inspectors
 after initial training and inspections have been implemented. These inspection reports
 will be recorded and filed at the City, and submitted to DEQ as part of the annual O&M
 report.
- The City will monitor deed restrictions on an annual basis to ensure compliance by the private property owners with Section 75-10-727 and the institutional controls. The City will also monitor compliance with its Street Cut Permit and Resolution. The monitoring will include annual reminder letters to the owners of properties upon which institutional controls have been placed. Inspections will be conducted at the beginning of excavations in the Wallace Avenue area to ensure compliance with the terms of the Street Cut Permit. Documentation of these inspections will be kept with City records with the Street Cut Permit.
- The City will submit annual reports to DEQ that discuss compliance with the various institutional controls, beginning on the first anniversary after DEQ's approval of the City's Construction Completion Report. These reports will include copies of all completed "Potential Asbestos Ore Along Wallace Avenue" forms from the previous year (if any). Additionally, these reports will include an updated copy of the GIS mapping system (if any) that shows any change in the "Areas of Potential Asbestos Ore Contamination" layer due to remediation or a determination that a certain area does not contain asbestos ore,

and justification for said changes. The reports will include copies of annual reminder letters, dates of training for inspectors, employees, and property owners, asbestos ore clearance letters, and any street cut permit inspection information. Finally, the report will state whether: (1) all necessary institutional controls remain in place; and (2) the institutional controls are adequately assuring protection of public health, safety, and welfare, and the environment.

- Reports will be filed with the VCP documents located in the Alfred P Stiff building, located at 20 East Olive Street. Bozeman, MT. All reporting shall be sent to the Director of Public Works.
- The City of Bozeman, through its Public Service Department, will incorporate into the appropriate City Health and Safety Plan a 2-hour annual asbestos awareness training for employees who may be involved in projects or response actions in the areas of observed or potential asbestos ore. This training will include the Water/Sewer, Streets, and Public Service Department employees.
- Asbestos training and awareness will include annual notification by mail, to the affected property owners, of the available asbestos awareness training including the information available at DEQ and on their web site.

The provisions set forth above will be implemented and detailed in an O&M Plan that will be submitted with the Construction Completion Report for this Addendum to the DEQ. The O&M Plan will initially cost around \$51,600 to implement a working program and have an annual maintenance cost of around \$13,040 for annual monitoring, reporting, and repairing structures. The O&M costs for a 30-year period are \$255,000. The cost estimates are detailed in Appendix E. This cost is included in each alternative except for Excavation and Disposal since all asbestos ore containing material will be removed as part of that alternative. The assumptions used as the basis for the initial cost included: training for the appropriate City employees, creating the forms, implementation of the forms into the City system, notifications to property owners and the initial inspection and documentation. The assumption used as the basis for the annual maintenance cost included: annual inspections, reporting, training and mailers.

3.2.4 Remediation Plan Plans and Alternatives Evaluation

In accordance with § 75-10-721, MCA, this addendum to the VCP must include an evaluation of whether each remediation Plan meets the following seven criteria:

- 1. Protectiveness:
- 2. Compliance with Environmental Requirements, Criteria, or Limitations;
- Mitigation of Risk;
- 4. Effective and Reliable;
- 5. Practicable and Implementable;
- 6. Treatment or Resource Recovery Technologies; and,
- 7. Cost Effectiveness.

The following remedial alternatives to address Potential Asbestos Ore areas at the Facility as shown on **Figure 2** were evaluated:

- Excavation and Disposal (previously evaluated and approved in 2002 VCP);
- Protective Measures for Wallace Avenue;
- Institutional Controls:
- Combined Alternatives; and
- No Action.

Table 1 is a summary of all the remediation alternatives proposed using the cleanup criteria contained within Section 75-10-721 of CECRA. A cost breakdown by item is contained in **Appendix E**.

Table 1: Alternatives Evaluation Summary

	Alternatives Evaluation Summary				
Alternative Criteria	*Excavation/ Disposal	Protective Measures for Wallace Ave.	Institutional Controls	Combined Alternatives	No Action
Protectiveness	Yes	No	No	Yes	No
Environmental Requirements, Criteria, or Limitations	Yes	Yes	Yes	Yes	No
Mitigation of Risk	Yes	No	No	Yes	No
Effective and Reliable	Yes	No	No	Yes	No
Practicable and Implementable	Not in inaccessible areas	Yes	Yes	Yes	Not practicable but easily Implementable
**Treatment or Resource Recovery Technologies	No	No	No	No	No
Cost Effectiveness	\$307,182 to \$1,117,396	\$388,784	\$355,320	\$437,504	\$0.00

^{*}As stated in Section 3.1 above, any excavation and disposal of asbestos ore containing material under this Addendum is a modification of Alternative 2 previously evaluated in Section 5.5 – Remedial Alternatives Comparison of the approved 2002 VCP. This alternative will not be evaluated any further in this Addendum.

3.2.4.1 Protective Measures for Wallace Avenue Plan and Evaluation

^{**}No treatment or resource recovery options are known to exist for asbestos ore.

The purpose of the Protective Measures for Wallace Avenue is to seal the Wallace Avenue right-of-way from Main Street to Curtiss Street to prevent exposure to the Observed or Potential Asbestos Ore. As discussed in the Potential Asbestos Ore Area Investigation Plan, portions of Wallace Avenue may be reclassified as Observed Asbestos Ore based on the results of the Wallace Avenue Investigation Plan discussed in Section 3.2.1.1. Asbestos ore has been found in the Wallace Avenue right-of-way west of the EBM south warehouse and was visible in the south excavation wall extending beneath pavement west of the NHB. Asbestos ore was also found to be used as fill material beneath the pavement at the corner of Wallace Avenue and Main Street as well as in the alley south of Heeb's Grocery. Planned test pits in Wallace Avenue may not provide conclusive evidence of all remaining asbestos ore beneath Wallace Avenue.

As referenced in Tetra Tech's SI Report (Tetra Tech 2008), several areas of pavement (concrete and asphalt) in Wallace Avenue and the Wallace Avenue right-of-way show distress and/or deterioration. On June 24 2008, Tetra Tech met with Mr. Dustin Johnson, Professional Engineer with the City – Engineering Division to determine if the City's Capital Improvement Plan included scheduled construction work for Wallace Avenue and/or replacement of water/sewer mains in the near future. Mr. Johnson indicated that no plans were "on record" for commencement in the next five years. Tetra Tech inspected paved areas in accordance with the pavement condition assessment to rate the pavement conditions (Tetra Tech 2008).

The protective measures listed will apply to Wallace Avenue and all paved areas of the Facility classified as containing Potential Asbestos Ore as indicated on **Figure 2** (such as the parking lot of Heeb's Grocery and the sidewalks on the southwest corner of Wallace Avenue and Main Street). The protective measures for Wallace Avenue are not intended to provide long term protection of human health and the environment. The protective measures proposed for Wallace Avenue are intended only to provide interim protection and prevention of potential exposures to asbestos contamination until such time that all remaining asbestos ore has been located and removed as per any specification in the applied institutional control measures. The protective measures in this alternative include:

- Encapsulation of Wallace Avenue and utility conduit through previously approved methods (2002 VCP) and the application of 2-inch mill 2ft wide around from Main to Curtiss, placement of a structural geosynthetic over areas rated as "Fair" in the SI Report, and installation of a 2-in asphalt overlay;
- Filling of cracks along sidewalks/curbs/gutters and driveways with asphalt tar;
- Removal and replacement of concrete sidewalks that have been rated as "Failed as Very Poor" in the SI Report; and
- Removal and replacement of pavement in areas that have been rated as "Failed as Very Poor" in the SI Report.

Following a visual inspection of all areas of asphalt proposed for removal or removed by milling or any other method shall be conducted prior and during removal. If there is any indication that any asphalt of paving removed may contain asbestos ore contamination, that material will be tested for asbestos. Any material found to contain asbestos contamination will be disposed of properly at the Bozeman Landfill.

A 2-in mill is the removal of a two-inch deep by two feet wide section of asphalt at the edge of the road for the purpose of tapering an asphalt overlay section into the existing curb and gutter or flow-line such that the edge will match the existing grades to allow for an overlay section to be placed on the road without complete removal of all asphalt or milling the entire road section.

Table 2: Alternative Evaluation for Protective Measures for Wallace Avenue Plan

Alternative Criteria	Alternative Evaluation
Protectiveness	By itself this alternative would not be protective of public health, safety and welfare, and the environment. This alternative would temporarily minimize the potential for asbestos ore fiber release through capping and/or encapsulation, and replacement, repair and maintenance of existing pavement/sidewalks in areas where asbestos ore contamination has the potential to exist. This alternative alone is not protective of the health of utility workers, construction workers and the general public, nor would the environment be protected from uncontrolled emissions caused by excavation activities. Asbestos ore does not migrate through the soil to groundwater; therefore, groundwater would be protected.
Environmental Requirements, Criteria, or Limitations (ERCLs)	This alternative would comply with all applicable and relevant ERCLs as noted in the VCP.
Mitigation of Risk	This alternative would temporarily mitigate potential exposure risks through the capping and/or encapsulation and maintenance of existing pavement on Facility properties; thereby preventing the release of asbestos ore fibers. However, it would not mitigate the risks to utility/construction workers.
Effective and Reliable	Without institutional controls ensuring proper asbestos ore management in these areas, this alternative will not be effective or reliable. An O&M plan will be developed to provide on-going maintenance of the protective measures to ensure that the alternative remains effective and reliable.
Practicable and Implementable	This alternative would be practicable and implementable as the protective measures can be initiated under this Addendum and properly maintained through an O&M plan developed by the City until such time as any remaining asbestos ore contamination identified has been removed.
Treatment or Resource Recovery Technologies	None is available for asbestos ore contamination.
Cost Effectiveness	This alternative will initially cost approximately \$82,184 to provide the encapsulation, repair and maintenance measures to the existing paved surfaces. It is estimated that the necessary O&M plan will cost \$51,600 to implement and \$13,040 annually for monitoring, reporting and additional repairs. The total cost estimate for this alternative is \$388,784. This alternative costs less than excavation and removal or the Combined Alternatives, but provides less risk reduction.

3.2.4.2 Institutional Controls Plan and Evaluation

Institutional Controls are proposed as an alternative to prevent exposure to the public, utility and construction workers, and the environment in the event that areas of Potential Asbestos Ore are disturbed. The institutional controls proposed are listed as follows:

- Deed Restrictions;
- City Street Cut Permit Application
- Geographic Information System (GIS) Mapping
- City Resolution

Pursuant to § 75-10-727, the City will use its best efforts to obtain the placement of institutional controls on all of the relevant properties, including properties owned by non-signatories to the Stipulated Agreement. The City will negotiate in good faith with the various property owners, and if the City is unsuccessful is placing a deed restriction on any necessary property, the City will notify DEQ. The deed restrictions are binding and run with the land. The instrument would require visual observation by an Accredited Asbestos Contractor/Supervisor and if necessary, sampling for asbestos upon disturbing any portion of the property. Upon disturbing any asphalt pavement, concrete, building or structure present on the deed-restricted property, or upon any change in use of the property, the current owner of the property will have to have a DEQaccredited asbestos abatement contractor remove, transport and dispose of the asbestos ore in compliance with all applicable state and federal environmental requirements, criteria, and limitations. The deed restriction will also require proper confirmation sampling to demonstrate the complete removal of the asbestos ore contamination from the property. As required by § 75-10-727, MCA, the institutional controls will be filed with the Gallatin County Clerk. A copy of the proposed deed restriction is included in **Appendix F**. A deed restriction may be needed on the following properties unless it is shown that asbestos ore contamination does not exist through the implementation of this VCP addendum. Any properties on the following list where a deed restriction is not required will be documented in the construction completion report.

- EMB North and South Warehouses
- Story Distributing Property
- Heeb's Grocery Store
- North and South Harrington Buildings
- Montana Department of Transportation for the portion of sidewalk on the southwest corner of Wallace Avenue and Main Street, which is shown as Observed Asbestos Ore Area on Figure 2
- The apartment complex that is shown as Potential Asbestos Ore Area on Figure 2 (managed by IES Properties and owned by Earl and Janice Peace)
- The parking lot west of the building labeled as "608 East Main Empire Building Materials," which is shown as Potential Asbestos Ore Area on Figure 2
- The other properties along Heeb's alley between Wallace Avenue and Church Avenue.

In order to protect anyone doing work in the portion of Wallace Street right-of-way identified as Potential or Observed Asbestos Ore, a modified City Street Cut Permit Application is proposed. The modified permit will require contractors to develop a contingency plan for the discovery of

asbestos ore when excavating in South Wallace Avenue. The permit will also require that an Accredited Asbestos Contractor/Supervisor be on-site during the excavation process. If asbestos ore is observed in the excavation, the modified permit requires work to cease, and the permittee must have a Montana Accredited Asbestos Abatement Contractor/Supervisor or Worker immediately remove, transport and dispose of the asbestos ore in compliance with all applicable state and federal environmental requirements, criteria, and limitations, including OSHA regulations. All asbestos ore containing material shall be properly disposed of at a DEQ-permitted Class II landfill as friable asbestos waste. A copy of the City Street Cut Permit Application is included in **Appendix F**.

The areas of Observed and Potential Asbestos Ore are proposed to be identified on the GIS mapping system. A specific layer will be identified as "Areas of Potential Asbestos Ore Contamination" on the GIS mapping system. This layer will be shown as a utility layer so that anytime a utility search is performed prior to excavation this layer will be shown. The areas identified on the GIS map will be easily recognizable and will encompass any areas identified as observed or Potential Asbestos Ore at the completion of this addendum. Additionally, the area will be identified on the City Section Maps. Section maps are used by city employees and maintained in city vehicles. Section maps contain relevant information that is crucial in cases of emergency to easily identify the location of utilities and the material types. The development and implementation of this mapping system will be complete by the submittal of the Construction Completion Report for this Addendum to the DEQ.

The Resolution identifies that there is Observed and Potential Asbestos Ore and the locations by an attachment of Exhibit A. The Figure will be similar to **Figure 2** of this addendum with revisions to reflect the changes identified and areas removed during VCP addendum implantation activities. The resolution requires that the following institutional controls be instituted:

- A street cut permit requirement for any work in Wallace Avenue right-of-way.
- The implementation of the GIS mapping system to identify areas of asbestos ore.
- A 2-hour City Health and Safety asbestos awareness training will be provided to necessary employees.
- Asbestos ore location mapping will be provided to the MDT.
- A requirement for proper removal and disposal of asbestos ore.
- The asbestos ore location information will be disseminated to the appropriate departments.

The resolution will be implemented within 30 days of the completion of the work associated with the VCP addendum and prior to the submittal of the draft Construction Completion report to DEQ. The GIS mapping and resolution attachment showing the location of the Potential Asbestos Ore and Observed Asbestos Ore can only be completed after the VCP addendum work is complete.

The City Resolution contained within **Appendix C** will remain in full force and effect until the entire Facility has either been remediated or determined not to contain asbestos ore, and all of the individual deed restrictions have been removed from the private properties in compliance with Section 75-10-727 of CECRA. The Street Cut Permit Application as included with this

addendum will remain in full force and effect until the entire area of Wallace Avenue south of Main Street (including sidewalks and rights-of-way) has either been remediated or determined not to contain asbestos ore. The City GIS mapping system will contain the layer identifying "Area of Potential Asbestos Ore Contamination" until specific areas identified have either been remediated or determined not to contain asbestos ore, and any individual deed restriction has been removed from the private properties in compliance with Section 75-10-727 of CECRA (as applicable). Violation of any of the requirements contained within this paragraph constitutes "new or different information than presented in the approved voluntary cleanup plan" under Section 75-10-738, which may warrant additional remedial action at the Facility.

Table 3: Alternative Evaluation for Institutional Controls Plan

Alternative Criteria	Alternative Evaluation
Protectiveness	By itself this alternative would not be protective of public health, safety and welfare, and the environment. Implementing a strategy for minimizing the potential for asbestos ore fiber release through institutional controls would ensure the proper handling and disposal of remaining asbestos ore contamination at the Facility, but would not address areas of degraded pavement in Wallace Avenue where potential asbestos ore may exist. Asbestos ore does not migrate through the soil to groundwater; therefore, groundwater would be protected.
Environmental Requirements, Criteria, or Limitations (ERCLs)	This alternative would comply with all applicable and relevant ERCLs as noted in the VCP.
Mitigation of Risk	This alternative would mitigate potential exposure risks through the placement of institutional controls on Facility properties; thereby requiring future remedial/preventative actions be taken during activities in which existing pavement and/or building structures would be disturbed. The mitigation of risk would be limited without addressing the degraded pavement in areas where asbestos ore potentially exists. Mitigation of risk would be enhanced through the multiple layers of measures proposed, and in combination with an O&M plan, as long as the institutional measures are adhered to by the participating parties.
Effective and Reliable	Layering of multiple institutional controls in the inaccessible Observed Asbestos ore and the Potential Asbestos ore areas will be effective and reliable because it will provide information and awareness to affected persons and will provide for the eventual remediation of all existing asbestos ore contamination on the Facility. Effectiveness is limited without addressing degraded pavement areas where asbestos ore has potential to exist.
Practicable and Implementable	This alternative would be practicable and implementable as the protective measures can be initiated by the City and properly maintained through an O&M plan until such time as any remaining asbestos ore contamination identified has been removed.
Treatment or Resource Recovery Technologies	None is available for asbestos ore contamination.
Cost Effectiveness	This alternative would initially cost the City money to implement changes to City codes/ordinances along with training costs of workers planning to perform work along these properties and City-owned areas of the Facility. Estimated Initial Cost of \$51,600 plus O&M costs. Additional costs would include increased pricing per project within the Facility boundaries and are dependent per project. This alternative is not as costly as the excavation and removal, Protective Measures for Wallace Avenue, and the Combined Alternatives, but by itself provides less reduction in risk.

Tetra Tech 12/11/2008

3.2.4.3 Combined Alternatives Plan and Evaluation

This alternative would combine Protective Measures for Wallace Avenue and Institutional Controls alternatives, along with the O&M plan associated with these two alternatives.

Table 4: Alternative Evaluation for Combined Protective Measures for Wallace Avenue and Institutional Controls

Alternative Criteria	Alternative Evaluation
Protectiveness	The combined plan provides adequate protection to public health, safety, welfare, and the environment. The Combined Plan effectively seals the potential asbestos ore areas, provides a method to evaluate and repair future degradation of paved surfaces, and provides controls that prevent unauthorized disturbance of soils without proper controls.
Environmental Requirements, Criteria, or Limitations (ERCLs)	This alternative would comply with all applicable and relevant ERCLs as noted in VCP.
Mitigation of Risk	This alternative would mitigate both the current risk and future risks of exposure to asbestos ore. Mitigation of risk would be enhanced through the multiple layers of measures proposed, and in combination with an O&M plan, as long as the institutional controls are adhered to by the participating parties.
Effective and Reliable	As long as the institutional controls are adhered to and O&M occurs, this alternative is effective and reliable. This alternative combines the evaluations of Tables 2 and 3 to create greater effectiveness and reliability through a layering of protective measures including sealing the potential asbestos ore areas, institutional controls, increased public awareness, and monitoring as provided in an O&M plan.
Practicable and Implementable	This alternative would be practicable and implementable as the protective measures of the two alternatives can be initiated by the City under this addendum and properly maintained through an O&M plan until such time as any remaining asbestos ore contamination identified has been removed.
Treatment or Resource Recovery Technologies	None is available for asbestos ore contamination.
Cost Effectiveness	This alternative would have the combined cost as defined by each of the two alternatives it includes. This alternative is more costly than the Protective Measures for Wallace Avenue and the Institutional Control Alternatives, but provides the combined risk reduction of the two. This alternative is significantly less costly than the excavation and disposal alternative and, with the implementation of the necessary O&M plan, this alternative provides substantially more reduction in risk than does the Protective Measures for Wallace Avenue or Institutional Control alternatives alone. The selected remedy is cost-effective, taking into account the total short- and long-term costs of the actions, including operations and maintenance activities for the entire period during which the activities will be required. The selected remedy provides overall risk reduction proportionate to the costs. To the extent that the estimated cost of the selected remedy exceeds the costs of the other alternatives, the difference in cost is reasonably related to the greater overall reduction in risk provided by the selected remedy

3.2.4.4 No Action Plan and Evaluation

No actions are proposed under this alternative for the Potential Asbestos Ore areas. Any potential asbestos ore will remain.

Table 5: Alternative Evaluation for No Action Plan

Alternative Criteria	Alternative Evaluation
Protectiveness	This alternative would be the least protective of public health, safety and welfare, and the environment. Current and future potential exists for exposure to asbestos ore contamination through deterioration and failure of paved surfaces, destruction of existing structures, and change in property use.
Environmental Requirements, Criteria, or Limitations (ERCLs)	This alternative would not comply with all applicable and relevant ERCLs as noted in the VCP.
Mitigation of Risk	This alternative would not provide for mitigation of risks to public health, safety and welfare, and the environment.
Effective and Reliable	This alternative would not be effective in the short or long term.
Practicable and Implementable	This alternative would be implementable; however, it would not be practicable as this action would cause the City future liabilities through non-prevention of known hazards to the public and future usage of the affected properties.
Treatment or Resource Recovery Technologies	This alternative would not use treatment or resource recovery technologies.
Cost Effectiveness	This alternative would have no associated costs; however, future development dollars would be impacted based on remediation costs. Although this alternative is less costly than the other alternatives, it does not sufficiently reduce risks associated with asbestos ore-contaminated soils.

4.0 PERMITS

Following is a list of Permits that are required to complete the Asbestos ore Remediation Plan and the Combined Protective Plan:

- City Construction Permit City of Bozeman
- Asbestos Transport and Disposal Permit MT DEQ
- NESHAPs Abatement Permit MT DEQ
- General Discharge Permit MT DEQ
- Landfill Expansion Permit MT DEQ
- MDT Encroachment Permit and Transportation Plan MT Department of Transportation

In addition to obtaining an asbestos waste transport and disposal permit, the asbestos project contractor will provide Waste Shipment Records documenting the waste transport and disposal to DEQ in the Construction Completion Report. Any of these permits deemed necessary will be obtained prior to commencement of the action for which they are required.

5.0 TRANSPORTATION ROUTE AND CONTINGENCY PLAN

A contingency plan was prepared for the VCP and is included with this addendum in **Appendix D**. A transportation haul route from the Facility to the City of Bozeman Landfill is included with the Contingency Plan as Figure 4. This haul route was previously established as part of the 2002 VCP and be used for this site since it is adjacent to the VCP Facility.

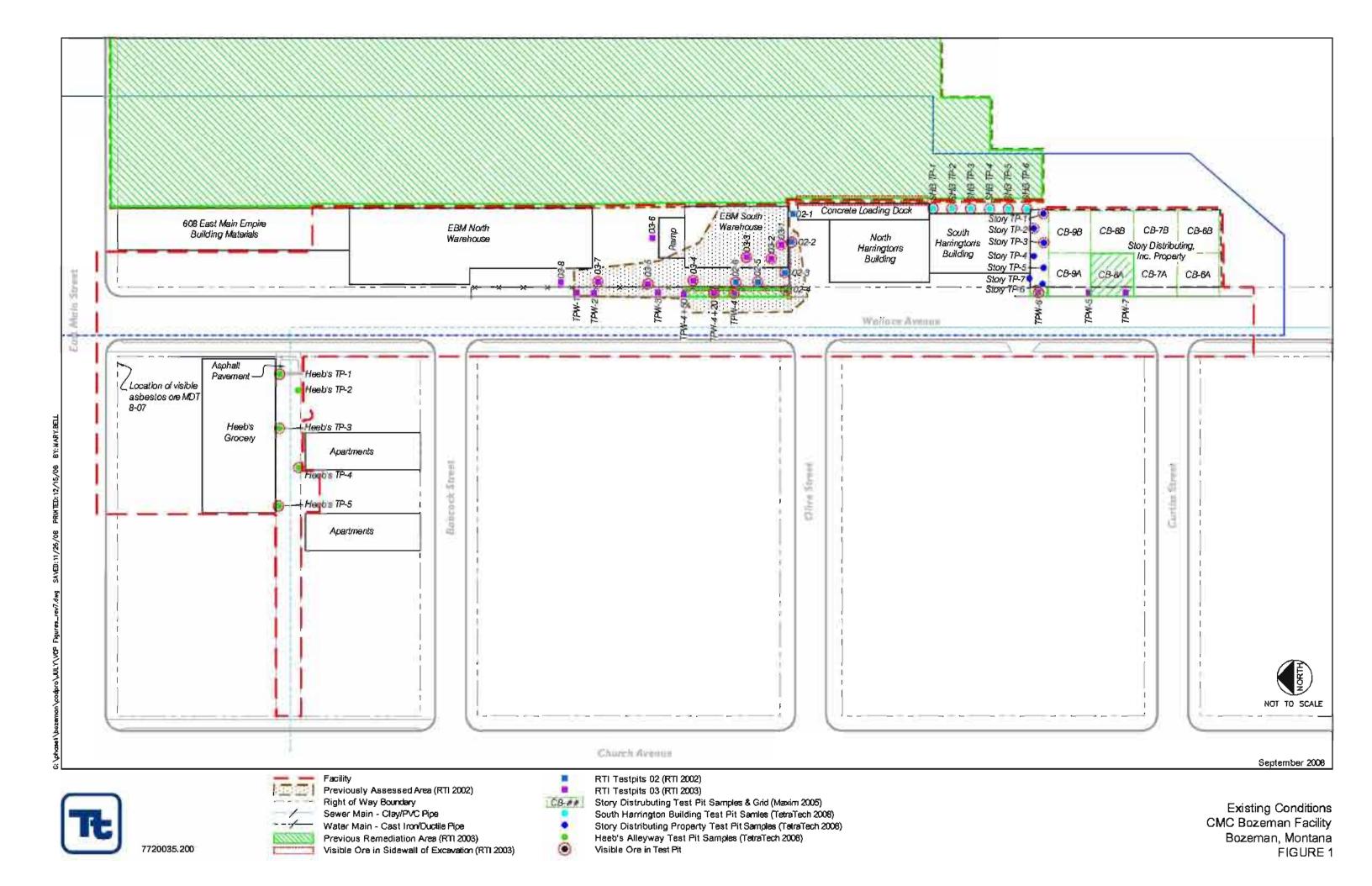
6.0 CONCLUSION

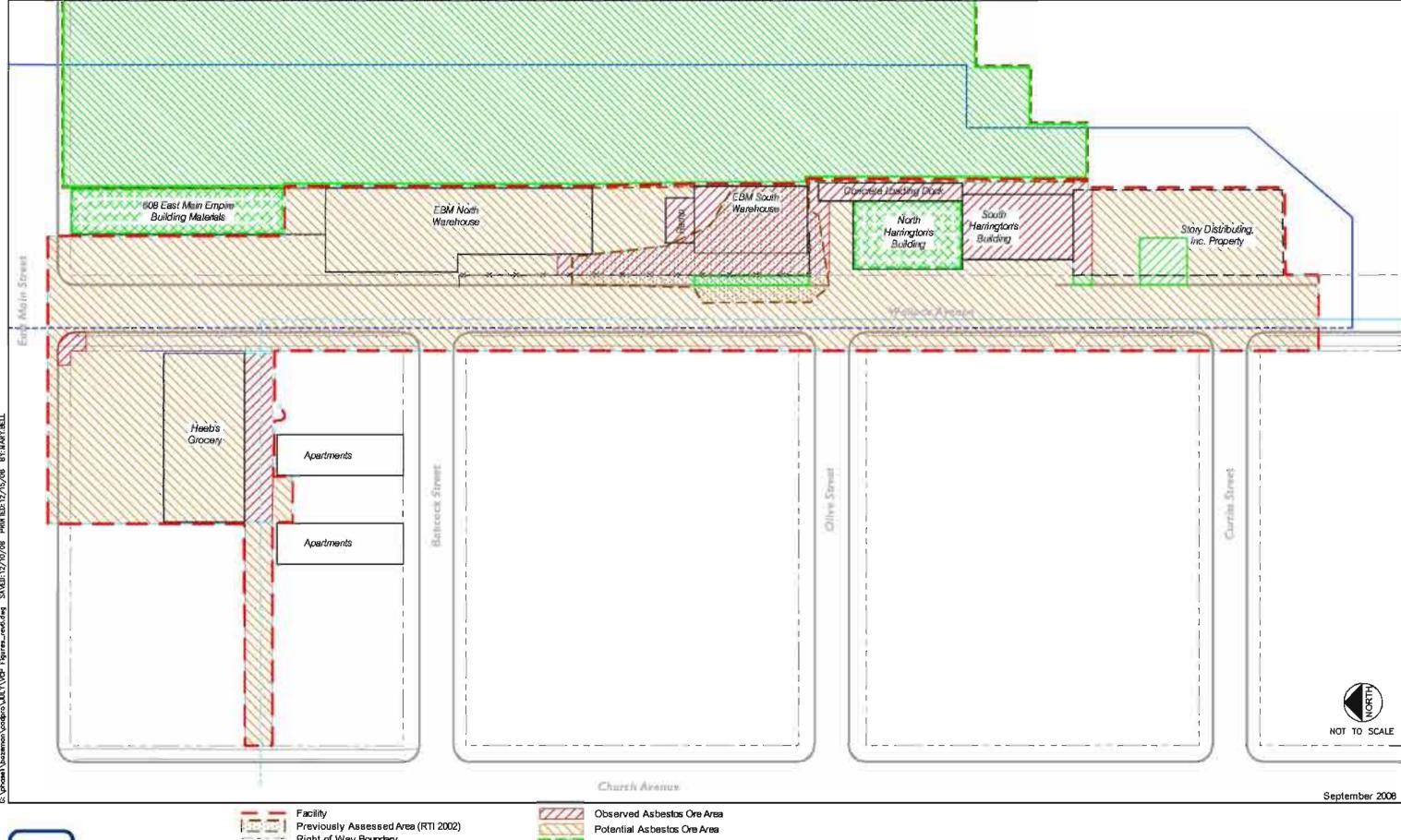
Through analysis of different remedial options for the Facility, the City's preferred alternative is for remediation of soils in the areas containing Observed Asbestos Ore and the Combined Plan for areas of Potential Asbestos Ore. The City recognizes the potential need to complete a separate investigation and Voluntary Clean-up Plan for the areas of Potential Asbestos Ore, and areas that may be reclassified as Observed Asbestos Ore. Additionally, any areas of observed or Potential Asbestos Ore that remain or are identified as part of the implementation of this VCP Addendum will be addressed through the institutional controls as identified and discussed in detail in Section 3.2.4.2.

The City anticipates that all asbestos ore Observed Asbestos Ore in the Facility will be addressed through the proposed remedial actions and all Potential Asbestos Ore will be addressed through a Remediation Plan. On December 2, 2008, DEQ granted the City's requested extension of the VCP deadline until June 30, 2009. The City anticipates the proposed plan herein will be completed within the prior of time require under the Voluntary Cleanup and Redevelopment Act and has provided a Project Schedule (Figure 8). Following completion of the remedial and management actions specified in this document, the City shall submit a Construction Completion Report to DEQ that describes the remedial and management actions performed. The report will include analytical data, data validation, photographs, QA/QC results, construction reports, material quantities, investigation and sampling notes, and copies or verification of all institutional controls in effect. The City's petition for closure will be in compliance with Section 75-10-738, MCA.

7.0 REFERENCES

- City of Bozeman. 2007 Stipulated Agreement.
- **Montana Department of Environmental Quality. 2006.** CMC Asbestos Bozeman CERCA Site Boundary, Statutory Notice to the City of Bozeman, Letter to City of Bozeman.
- **Montana Department of Transportation. 2007** Request for Work Plan for Conducting Asbestos Cleanup Activities Main Street Bozeman. Letter to Jim Maus, Tetra Tech.
- **Maxim Technologies. 2005.** Additional Asbestos Soil Investigation for Tracts 3, 4 and Story Distributing Property, Prepared for the City of Bozeman.
- **Resource Technologies**, **Inc. (RTI) 2002.** Voluntary Cleanup Plan for the CMC East Main Depot Bozeman, Montana, Revision 2. Prepared for the City of Bozeman.
- **Resource Technologies, Inc. (RTI) 2003.** Revision 1, Addendum to the Voluntary Cleanup and Plan for the CMC East Main Depot Site Boundary, Bozeman, Montana. Letter to DEQ.
- **Resource Technologies, Inc. (RTI) 2004.** Voluntary Cleanup and Redevelopment Act Voluntary Cleanup Completion Report, Revision 1, CMC East Main Depot Site the Primary Portion of the CMC Asbestos Bozeman Site Boundary Bozeman, Montana. Prepared for the City of Bozeman.
- **Tetra Tech, Inc. 2007.** Final Revision CMC Bozeman Site Boundary Supplemental Investigation. Prepared for the City of Bozeman.
- **Tetra Tech, Inc. 2008**. CMC Bozeman Site Boundary: Revised Pavement Assessment. Prepared for the City of Bozeman.

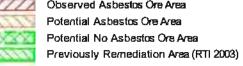


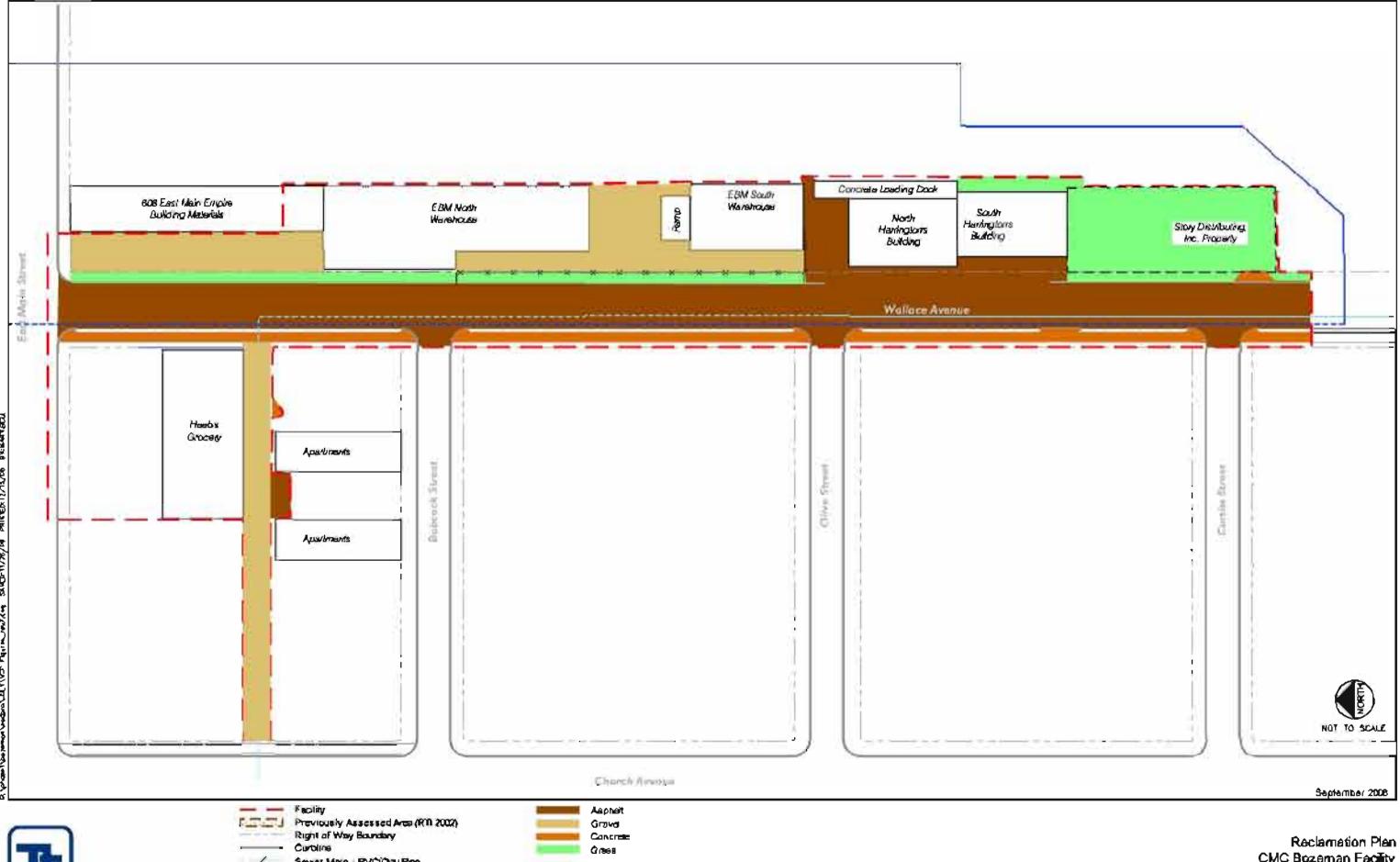






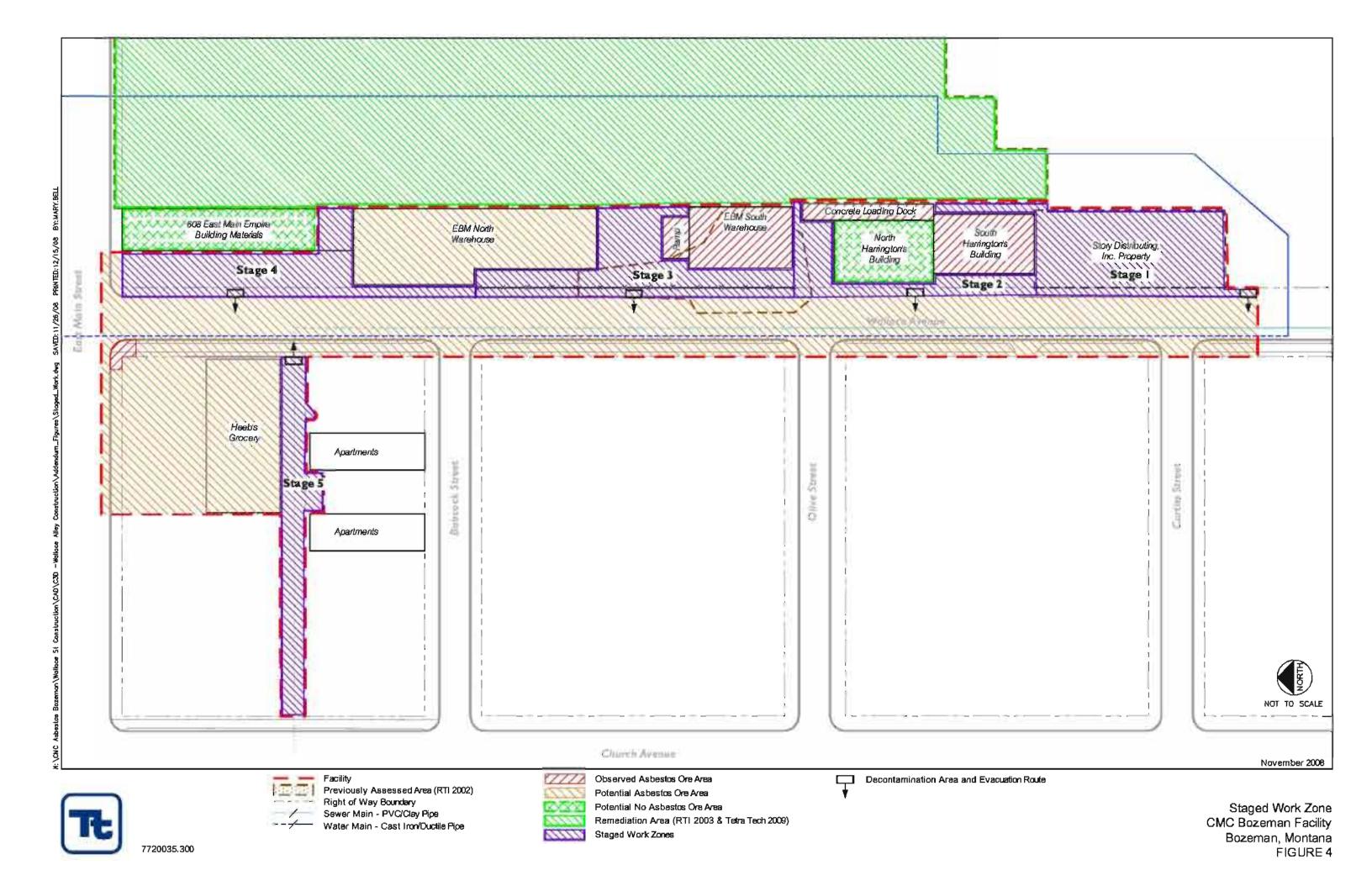
Right of Way Boundary
Sewer Main - PVC/Clay Pipe
Water Main - Cast Iron/Ductile Pipe

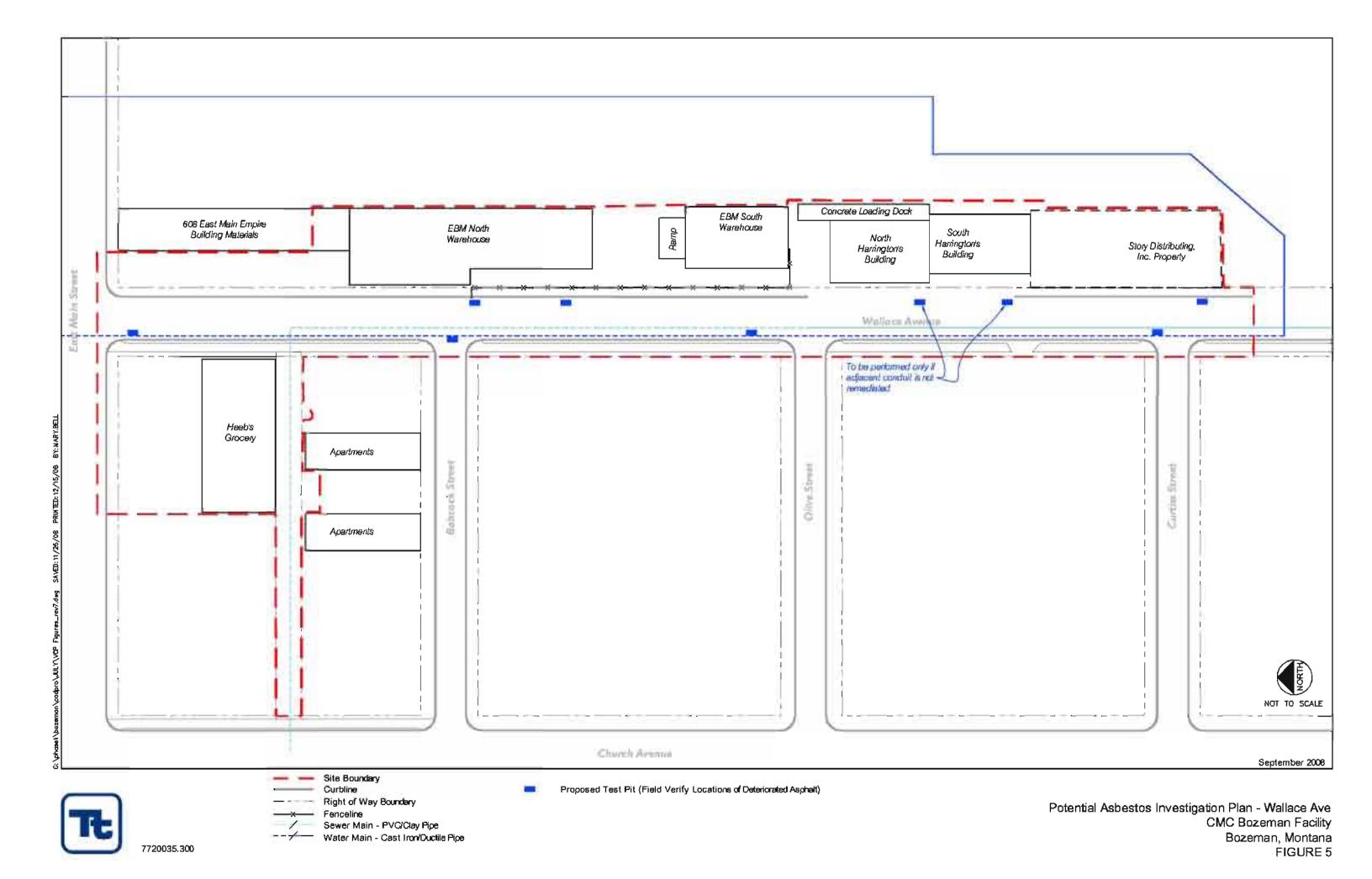


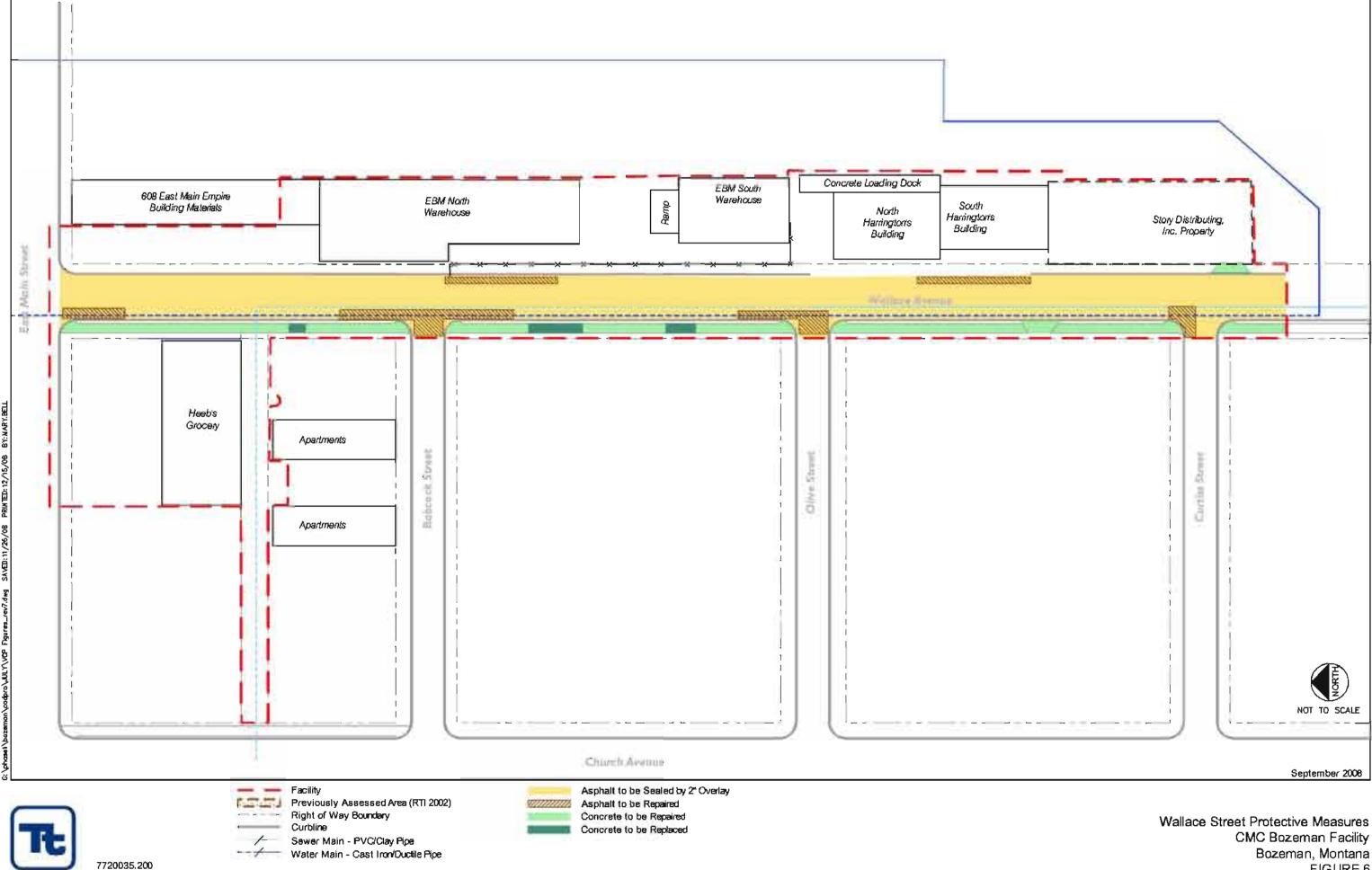


7720025,200

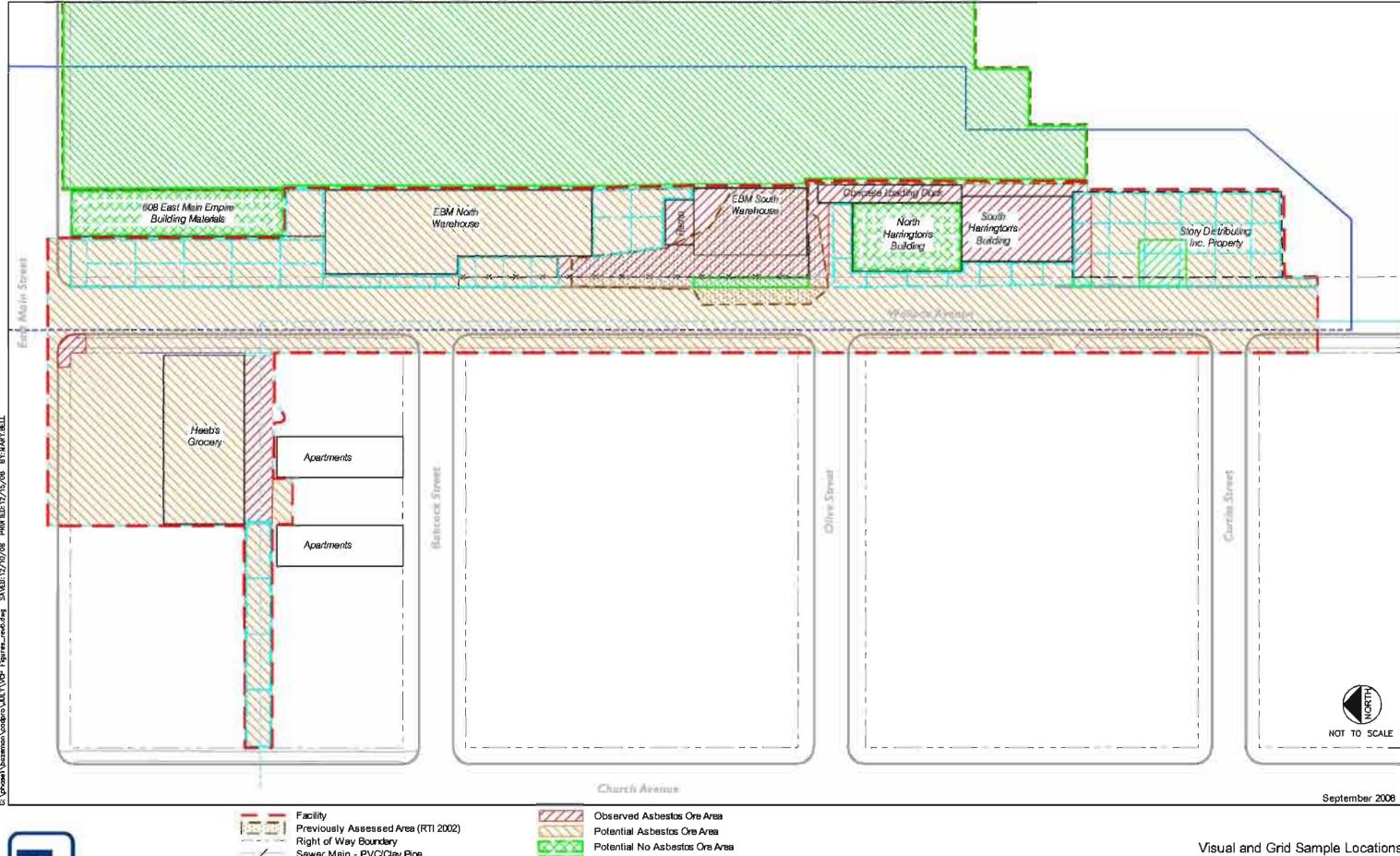
Sewer Marn - PVO Oay Pipe







Bozeman, Montana FIGURE 6







Right of Way Boundary
Sewer Main - PVC/Clay Pipe
Water Main - Cast Iron/Ductile Pipe

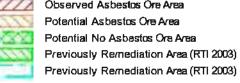
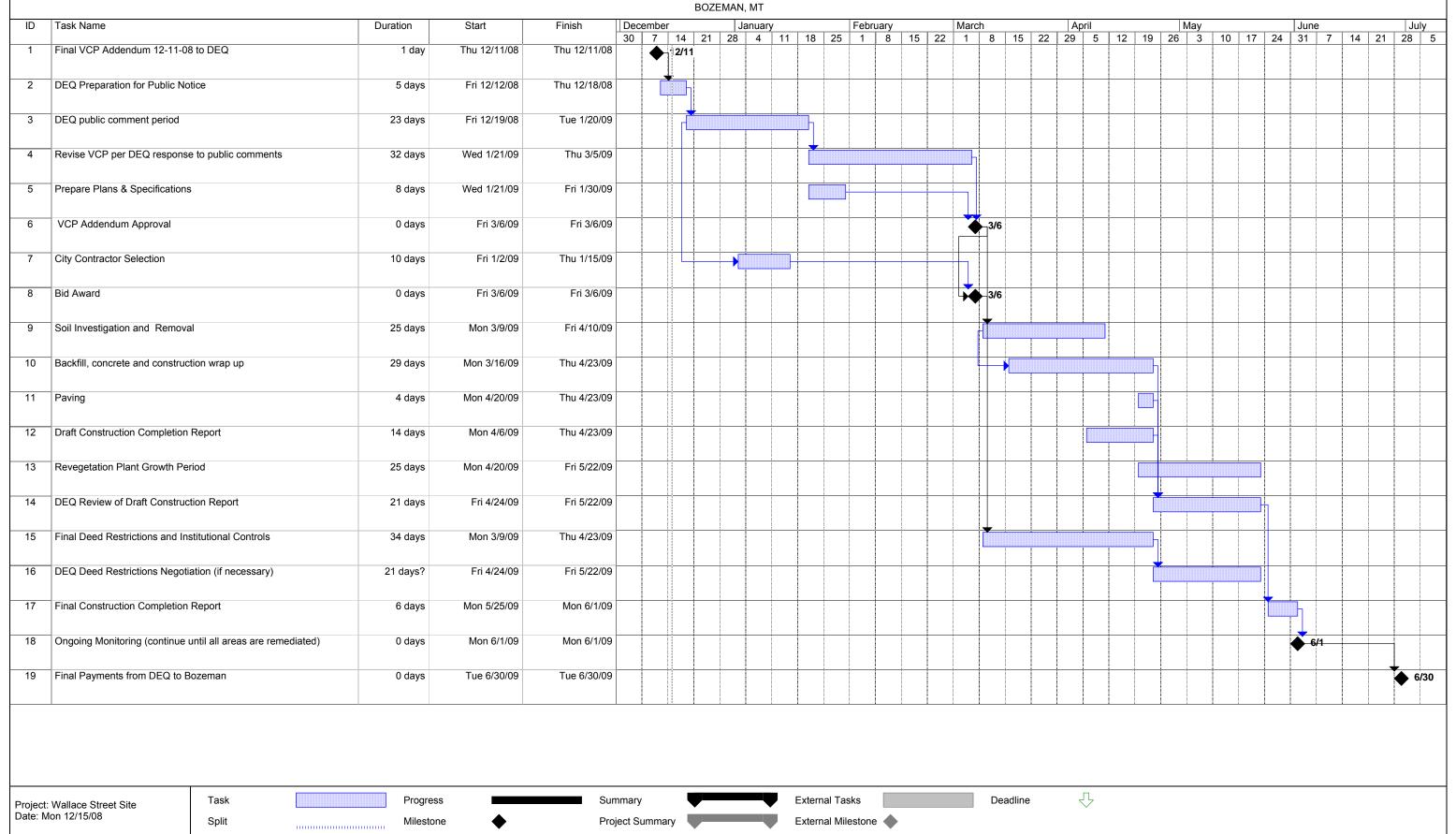


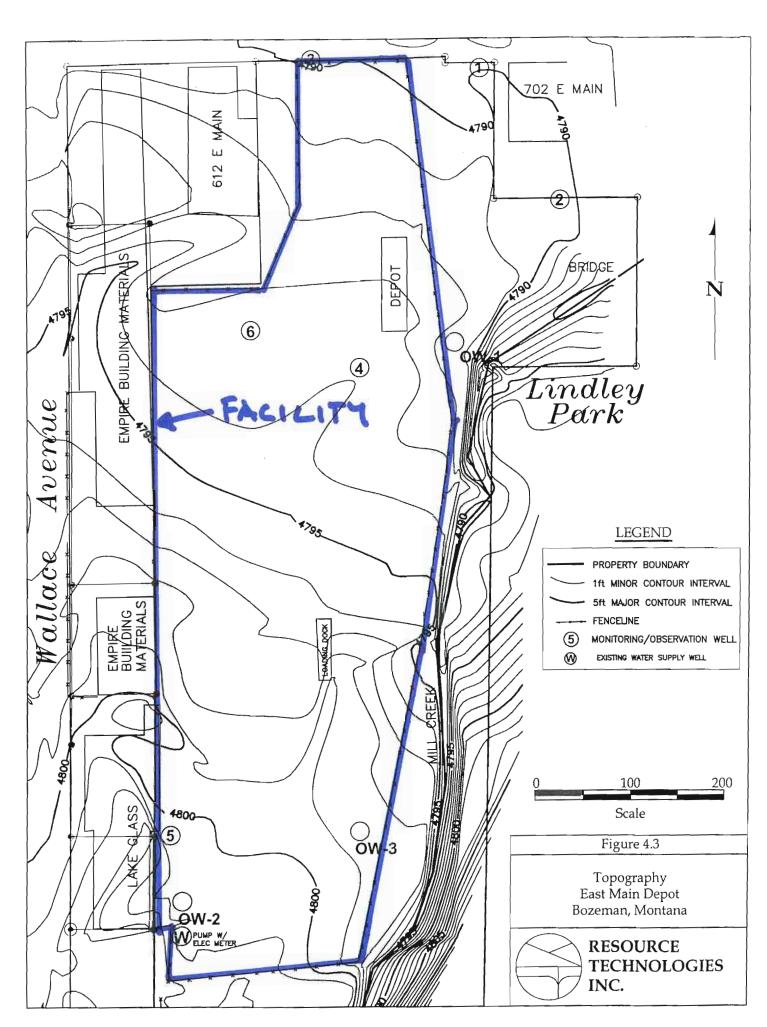
FIGURE 8 - PROJECT SCHEDULE

CMC BOZEMAN ASBESTOS FACILITY CLEAN-UP SOUTH WALLACE STREET BOZEMAN, MT



Page 1

APPENDIX A EXCERPTS FROM THE 2002 VCP



APPENDIX B EXCERPTS FROM PREVIOUS SAMPLING LOCATIONS AND TEST PITS

Resource Technologies, Inc.

601 Nikles Drive, Suite 14, Bozeman, MT 59715 • Internet: rti@montana.net Voice: (406) 585-8005 • Telefax: (406) 585-0069

September 23, 2003

Mr. David Bowers
Site Response Section – Remediation Division
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Subject:

Revision 1, Addendum to the Voluntary Cleanup Plan for the CMC East

Main Depot Facility, Bozeman, Montana

Dear Mr. Bowers,

On behalf of City of Bozeman, Resource Technologies, Inc (RTI) is submitting this addendum to the subject Voluntary Cleanup Plan (VCP) to address asbestos ore observed within the Wallace Avenue right-of-way. The right-of-way (ROW) is a 60 foot wide property owned by the City of Bozeman in which Wallace Avenue is located. The asbestos ore addressed in this addendum has been observed in the area between the east curb and the east edge of the ROW. There is not sidewalk along the east side of Wallace Avenue.

Background

In October 2002, RTI conducted a preliminary investigation to determine if asbestos ore was present on the Empire Building Materials (EBM) and Harrington properties. The EBM property is located at 608 East Main Street; however, this long and narrow property extends two blocks to the south along the east side of Wallace Avenue (Figure 1). The Harrington property is located at 212 South Wallace, immediately south of the EBM property. Both properties are adjacent to the East Main Depot facility, now owned by the City of Bozeman. The Montana Department of Environmental Quality (DEQ), under the authority of the Comprehensive Environmental Cleanup and Redevelopment Act (CECRA), regulates the East Main Depot facility.

The DEQ requested investigation of these properties to determine if asbestos ore was present at locations reportedly used as ore stockpiles in the past. A DEQ representative was present during the October 2002 investigation when six test pits, identified as pit TP-02-1 through -6 were excavated with a backhoe. The locations of the test pits are shown in Figure 1.

The second investigation was performed on April 17, 2003 on behalf of EBM to better define the lateral extent of asbestos ore on their property. Eight test pits identified as TP-03-1 through –8 were excavated with a power auger mounted on a skid-steer. The locations of the test pits are shown in Figure 1.

Visible asbestos ore was detected in test pits 02-2, 02-3, 02-4, 02-5, 02-6, 03-1, 03-2, 03-3, 03-4, 03-5, and 03-7. Ore was not observed in pits 02-1, 03-6, and 03-8. In test pits where no asbestos ore was visible, samples of undisturbed soil were collected from the sidewall of the pit. A sample was also collected from pit 02-4 below the apparent depth of ore to determine the vertical extent of regulated asbestos containing material (RACM) and a composite sample of the gravel surface in the yard was also collected. All soil samples were submitted to Quantem Laboratories for polarized light microscopy (PLM) analysis using the 400-point count method. The analytical results are summarized on Table 1. Asbestos was not detected at concentrations greater than the regulatory limit of 1% in any soil samples analyzed.

Table 1. Soil Sample Results, Empire Building Materials Investigations

Sample ID	Date	Description	Method	Result
TP02-01	10/1/02		PLM 400 p.c.	<1%
TP02-04	10/1/02	12" to 18"	PLM 400 p.c.	NAD
Empire Surface Composite	10/1/02	Composite of surface materials west of south warehouse	PLM 400 p.c.	NAD
EBM-03-06	4/17/03	6" to 12"	PLM 400 p.c.	<1%
EBM-03-08	4/17/03	9" to 12"	PLM 400 p.c.	NAD

PLM = polarized light microscopy

p.c. = point count

NAD = no asbestos detected

Because visible asbestos ore was observed in the test pits along the west side of the EBM properties, DEQ requested investigation of the area between the east curb and east side of the ROW of Wallace Avenue.

On August 26, 2003, RTI excavated seven test pits identified as TPW-1 through -7 in the area between the curb and the east edge of the ROW of Wallace Avenue. Four of the pits were adjacent to the EBM property and three of the pits were adjacent to the Story Distributing property located south of the Harrington property on South Wallace Avenue. Pits TP-W-5 though -7 were excavated because visible asbestos ore had been discovered on the ground surface of the Story Distributing property in August 2003.

No visible ore was observed in test pits TP-W-1, TP-W-2, and TP-W-3. Soil samples were collected from these pits and submitted to Quantem Laboratories for polarized light microscopy (PLM) analysis using the 400-point count method. The analytical results are summarized on Table 2. Asbestos was not detected in any soil samples analyzed. Visible asbestos was observed in TPW-4 at depth of approximately 2 to 6 inches below the ground surface. The ore extended to the concrete curb at the east edge of the street. A soil sample was collected from a depth of 8 inches adjacent to the base of the curb. No asbestos fibers were detected in any of the samples collected. On August 29, 2003, three holes were hand dug along the edge of the curb to further define the northern extent of asbestos between the curb and the east ROW boundary. Visible asbestos was observed just north of the paved driveway to the Harrington property and in the hole dug approximately 20 feet north of TP-W-4. No asbestos was observed in a hole dug

approximately 50 feet north of TP-W-4. Based on these observations, it appears the north-south extent of asbestos along EBM property is less than 100 feet.

TP-W-6 was excavated between the ROW boundary and the street just south of the edge of the pavement driveway serving the Harrington property at 212 S. Wallace. A single, 4-inch piece of asbestos ore was discovered in gravel located at a depth of approximately 8 inches. A sample was collected of the apparently clean fine grained soil located below the gravel. The pit was extended several feet east and west but no further ore was detected. No pits were excavated in the ROW located between the Harrington property at 212 S. Wallace and the street because it is paved.

TP-W-5 was excavated south of TP-W-6. No asbestos ore was observed to the total depth of 3 feet. TP-W-7 was excavated south of TP-W-5. Fine-grained soils were observed from the ground surface to the total depth of approximately 2 feet and no asbestos ore was visible. A sample of the top 6 inches was collected. No asbestos fibers were detected in any of the samples submitted for analysis.

Table 2. Soil Sample Results, Wallace Avenue Investigation

Sample ID	Date	Description	Method	Result
TP-W-I	8/26/03	8"-24"	PLM 400 p.c.	NAD
TP-W-2	8/26/03	6"-18"	PLM 400 p.c.	NAD
TP-W-3	8/26/03	6"-18"	PLM 400 p.c.	NAD
TP-W-4	8/26/03	18"	PLM 400 p.c.	NAD
TP-W-5	8/26/03	0"-24"'	PLM 400 p.c.	NAD
TP-W-6	8/26/03	12"-24"	PLM 400 p.c.	NAD
TP-W-7	8/26/03	0"-6"	PLM 400 p.c.	NAD

PLM = polarized light microscopy

p.c. = point count

NAD = no asbestos detected

Proposed Remedy

The presence of asbestos between the east curb and the east ROW boundary of Wallace Avenue has been confirmed. The presence of asbestos has been confirmed in shallow soils above the base of the curb (less than eight inches). This proposed remedy will only address asbestos ore between the east curb and the east ROW boundary. If ore is observed or detected under the street or the paved portion of the ROW between the street and the Harrington property it will be addressed separately.

The asbestos observed in the area between the east curb and the east ROW boundary is shallow and readily accessible. While in-place management of these materials is an alternative, the long-term protectiveness of this alternative is marginal. To comply with the National Emission Standards for Hazardous Air Pollutant (NESHAP) standards, this material should either be fenced or capped. Placement of cap material to obtain the required cover would not be feasible along the curb.

Given the fact that the asbestos ore in the area between the east curb and the east ROW boundary is near the surface and in an area accessible to the public, corrective action is proposed to mitigate the risk of exposure. Removal of the ore in the area between the east curb and the east ROW boundary of Wallace Avenue along the Story Distributing property is also recommended. Excavation of soils containing asbestos and disposal at the Bozeman Landfill concurrently or at the end of the ongoing remediation activities at the former East Main Depot facility is recommended.

The estimated mass of asbestos containing soils in the area between the east curb and the east ROW boundary adjacent to the EBM property is less than 120 tons and the estimated mass along the Story Distributing property is less than 60 tons. Presuming the side dump trucks are used to transport the waste, approximately seven loads of waste will be transported. The waste will be handled in accordance with the approved VCP including placement in lined trucks and transportation and disposal within the designated asbestos disposal area within the active cell of the landfill. Procedures unique to handling these soils are outlined below.

Traffic on Wallace Avenue will be detoured around the work area excepting access to local residents and businesses as required (Figure 2). An exclusion zone will be created around the work area using safety fencing mounted on steel tee-posts where possible and stanchions within the roadway. The exclusion zone will be provided with signage in accordance with applicable regulations as outlined in the VCP.

Excavation will be performed using wet methods. Excavation may be performed with an excavator or backhoe and by hand excavation around utilities. Utilities along the east side of Wallace Avenue include fiber optic lines, an abandoned natural gas line, and water service crossings. All areas of visible asbestos ore will be excavated if feasible. If substantial ore is observed around the fiber optic cables, this material may be left in place and its disposition addressed separatly. All waste excavated within a working day will be loaded, transported, and disposed during the same working day. No waste will be stockpiled on site.

The safety fencing will be temporarily opened to allow trucks to enter and exit. After entering the exclusion zone the trucks will be lined with 6-mil polyethylene sheeting and a tarp or other protective barrier will be placed over the side of the truck bed to keep spilled waste material from contacting the trucks and eliminate the need for decontamination. Any waste that spills onto the pavement will be immediately cleaned up to ensure tires do not contact waste materials.

After loading, the waste will be fully sealed with polyethylene sheeting and tarped as detailed in the VCP. The truck will then be inspected and any uncontained waste shall be removed. After inspection, the truck will transport the waste to the Bozeman landfill for disposal. The trucks will travel north on Wallace Avenue to Main Street, then east on Main Street and follow the transportation route designated in the VCP. The trucks will enter the landfill, be scaled on the landfill's scales, and then continue to the asbestos waste disposal area. Waste unloading, cover, and truck decontamination will be performed in accordance with the VCP and the procedures currently in place.

Negative exposure assessments were developed for these work activities during the early phases of the East Main Depot remediation. Because of this full personnel

decontamination facilities are not required. Level D personal protection will be utilized and boot wash will be provided and required. Workers may choose to wear additional protective equipment including respirators.

Equipment used to excavate, load, or otherwise contact the waste will be decontaminated in a temporary decontamination facility designed to contain the wastewater or wrapped and transported into the East Main Depot facility for decontamination. Any wastewater generated by decontamination will be pumped into a transportable holding tank and transferred to the East Main Depot facility for disposal in accordance with the procedures in the VCP.

Samples of the cleared areas will be collected as excavation progresses. Samples will be collected in accordance with the procedures for confirmation sampling outlined in the VCP with the cell dimensions being modified to 10 feet by 25 feet. Each sample will be submitted for asbestos analysis using the PLM 400-point count method. Rush analysis will be requested and backfill will not be placed until the areas are cleared. If the cleanup goal of 1% is exceeded for a cell, additional soil will be excavated from that cell.

The west side walls of the excavation will be inspected to determine if visible asbestos is present under the street. If no asbestos is visible, one composite sample for every 25 linear feet of sidewall will be collected and analyzed for using the PLM 400-point count method. If asbestos ore is visible or if asbestos is detected in soil samples collected from along the sidewall, the disposition of the materials under the street surface will be addressed separately.

After clearance sample results are received, the excavations will be backfilled with pit run to a depth of 4 inches below grade, and then filled to existing grade with top soil. After the top soil has been placed the area will be seeded with the permanent seed mix specified in the VCP.

Please call if you have any questions or concerns.

Sincerely,

Resource Technologies, Inc.

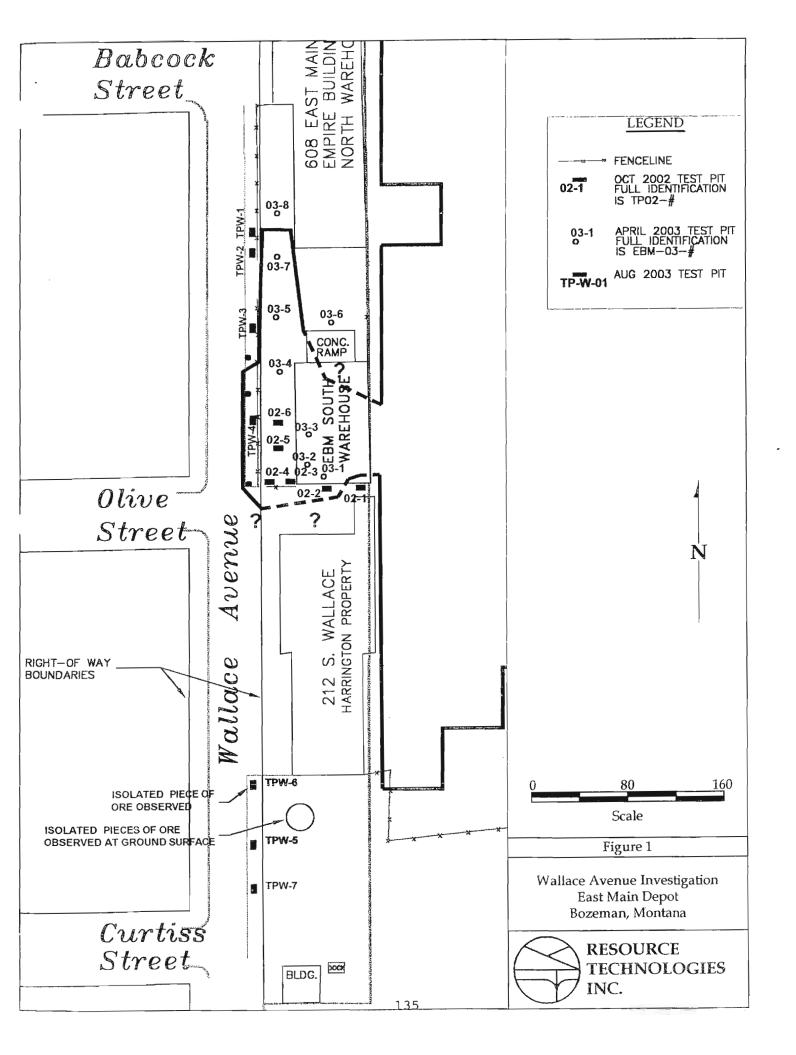
Bro Blux

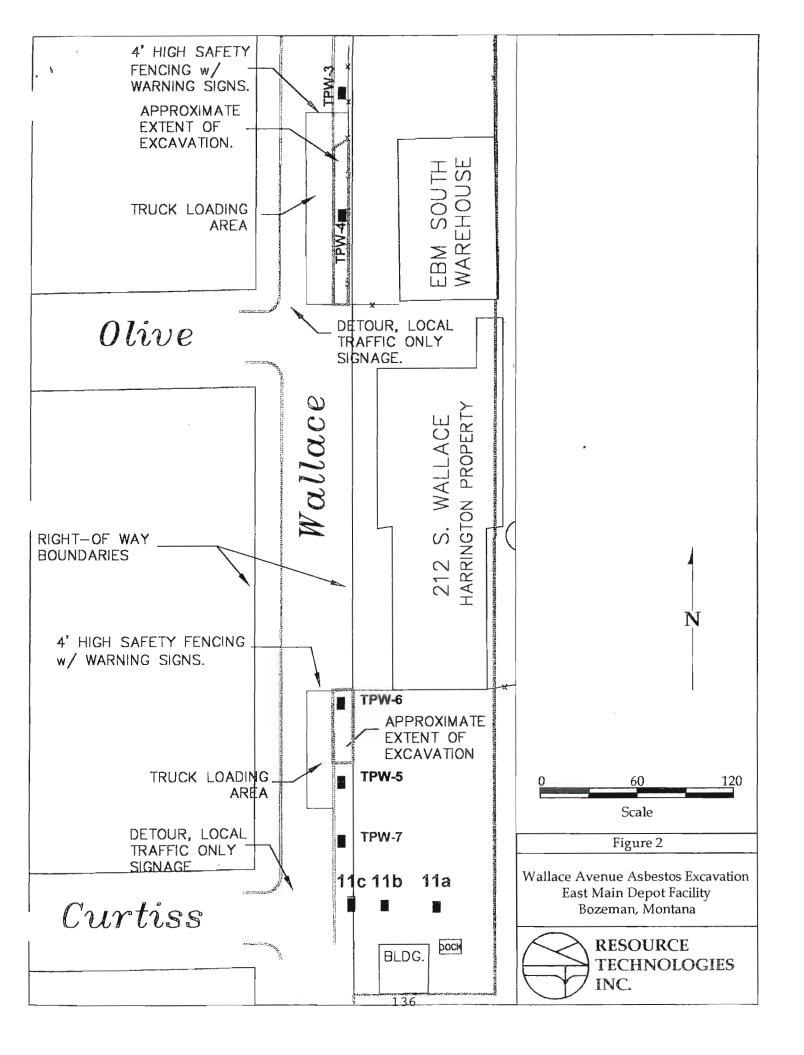
Brian Blicker, PE Project Manager

cc: Robert Murray, COB Engineering

Mark Kottwitz, COB Solid Waste Superintendent Kath Williams, Chair, Remediation Subcommittee Alice Meister, Director Bozeman Public Library

Rick Rogers, Envirocon, Inc.





samples (when applicable) – indicated a detectable concentration of anthophyllite asbestos. Laboratory soil analytical results are presented in Appendix H.

TABLE 3: SOUTH HARRINGTON BUILDING SOIL SAMPLE RESULTS Composite and Base Samples for SHB TP-1 through SHB TP-6						
Test Pit (TP) Sample Number with Soil Classification	Location of Sample*	Sample Depth (FT)	Asbestos Soil Result			
10 – SHB TP-1; Dark Brown Clayey Silts w/no or very little gravels	Base	4.0 +	ND**			
11 – SHB TP-2; Dark Brown Clayey Silts w/no or very little gravels	Base	4.0	ND			
12 – SHB TP-2; 12"-minus with poorly graded sandy soil with gravels	Side Wall Composite	0 – 3.0***	ND			
13 – SHB TP-3; Dark Brown Clayey Silts w/no or very little gravels	Base	2.5 ****	ND			
14 - SHB TP-4; Dark Brown Clayey Silts w/no or very little gravels	Base	4.0	ND			
15 – SHB TP-4; 10"-minus with poorly graded sandy soil with gravels	Side Wall Composite	0 – 3.0***	ND			
16 – SHB TP-5; Dark Brown Clayey Silts w/no or very little gravels	Base	2.5	ND			
17 – SHB TP-5; 10"-minus with poorly graded sandy soil with gravels	Side Wall Composite	0 – 2.5***	ND			
18 – SHB TP-6; 10"-minus with poorly graded sandy soil with gravels	Base	2.5	ND			

^{*} Where no composite sample is located for a specific test pit, the asbestos ore was approximately present to that test pit base depth.

Based on visual evidence of asbestos ore within the test pit excavations and the randomness of test pit locations, it is Tetra Tech's opinion that all soils along the east side of the SHB are contaminated with asbestos ore to each respective test pit depth, as noted. All volume calculations have been based on these assumptions.

4.2.2 Heeb's

The Heeb's building was assessed on December 20, 2007. The assessed area consisted of an approximate 18-foot width by 158-foot length area of soil situated directly against the exterior concrete foundation/footing wall of the south Heeb's building across the alley and adjoining the north edge of adjoining properties to the south (residential properties and an apartment complex). Appendix A, Figure 1 contains a visual representation of this assessed area. The visual assessment indicated the presence of asbestos ore throughout the entire length of this assessment area from depths of 0.0-feet to 1.5-feet as documented by the five test pits distributed randomly along the north and south edge of the alley. This area is shown in Tetra Tech's test pits logs (Appendix E) as well as pictorially represented in Appendix F - with locations for each test pit noted with respect to existing structures. In addition to the test pits, visible asbestos ore was observed within two to three feet of test pit Heebs TP-2 along a concrete driveway. The test pit logs additionally document different respective soil classifications to depths with which native soil was encountered.

Tetra Tech collected samples from the following five test pits: Heebs TP-1, Heebs TP-2, Heebs TP-3, Heebs TP-4, and Heebs TP-5. A three-dimensional graphical representation of this area is shown in Appendix A: Figure 6. Tetra Tech estimates the actual – as represented by visible asbestos ore in each test pit – volume of asbestos ore waste is 122.5 yd³. Tetra Tech estimates the theoretical – as calculated by more qualitative measures using an over-excavation strategy

^{**} ND = None Detected based upon 0.25% Target Analytical Sensitivity with CARB 435

^{***} Asbestos ore visually noted in excavation material alongside test pit.

along with adjusting visible ore to match "discovered" asbestos ore in excavation piles and/or other assumed derivations – volume of asbestos ore waste volume is 227 yd³ and should be considered a more accurate waste volume for this area. With an estimated "bank" volume of 227 yd³, and assuming a 30 percent contingency, this equates to approximately 295 yd³ of asbestos ore "haul" yards. Tetra Tech's calculations are included in Appendix G.

Soil sample results from test pit bases and pit wall composites are presented in Table 4. It should be noted that none of the test pits that were sampled – either from the base samples or the composite samples (when applicable) indicated a detectable concentration of anthophyllite asbestos. Laboratory soil analytical results are located in Appendix H.

TABLE 4: HEEB'S ALLEY BUILDING SOIL SAMPLE RESULTS Composite and Base Samples for HEEB's TP-1 through HEEB's TP-5						
Test Pit (TP) Sample Number with Soil Classification	Location of Sample*	Sample Depth (FT)	Asbestos Soil Result			
1 – HEEBS TP-1; Brown Clayey Silts w/no or very little gravels	Base	3.0*	ND**			
2 – HEEBS TP-2; Brown Clayey Silts w/no or very little gravels	Base	3.0	ND			
3 – HEEBS TP-2; Dark Brown 5-inch minus road mix with gravels	Pit Wall Composite	0 - 3.0***	ND			
4 – HEEBS TP-3; Brown Clayey Silts w/no or very little gravels	Base	3.0	ND			
5 – HEEBS TP-3; Dark Brown 5-inch minus road mix with gravels	Pit Wall Composite	0 – 3.0	ND			
6 – HEEBS TP-4; Brown Clayey Silts w/no or very little gravels	Base	3.0	ND			
7 – HEEBS TP-4; Brown Clayey Silts w/no or very little gravels	Pit Wall Composite	1.5 – 3.0	ND			
8 – HEEBS TP-5; Brown Clayey Silts w/no or very little gravels	Base	3.0	ND			
9 – HEEBS TP-5; Brown Clayey Silts w/no or very little gravels	Pit Wall Composite	1.5 – 3.0	ND			

^{*} Where no composite sample is located for a specific test pit, the asbestos ore was approximately present to that test pit base depth.

Based on visual evidence of asbestos ore within the test pit excavations and the randomness of test pit locations, it is Tetra Tech's opinion that soils along the south side of the Heeb's building are contaminated with asbestos ore to each respective test pit depth. All volume calculations have been based on these assumptions. In addition, it is likely that asbestos ore soil found in the alley behind Heeb's was used as "fill" material to increase the elevation of the alley prior to construction of the apartment complex (located southwest of Heeb's). Tetra Tech understands the "fill" material was added to allow for a proper apron assisting the apartment complex patron with accent and decent from/into the alley. It is with this knowledge that Tetra Tech suggests that the asbestos ore "fill" material may extend beneath the apartment complex north apron and westerly down the rest of the length of the alley.

4.2.3 Story Distributing Property

The Story Distributing property was assessed on December 28, 2007. The assessed area consisted of an approximate 100-foot width by 15-foot length area of soil situated directly against the exterior concrete foundation/footing wall of the SHB building – extending west towards Wallace Avenue and 15-feet directly south of the building on the Story Distributing

^{**} ND = None Detected based upon 0.25% Target Analytical Sensitivity with CARB 435

^{***} Asbestos ore visually noted on top concrete driveway in expansion joints to the south of the excavation approximately 45 feet from west Wallace Avenue Sidewalk and 25 feet from Heeb's building (Appendix A, Figure 3)

property. This SI area adjoined the previously assessed area near the City library as documented in Appendix A, Figure 1. The visual assessment indicated the presence of asbestos ore in this assessment area from depths of 0.0-feet to 3.5-feet as documented by the seven test pits and shown in Tetra Tech's test pits logs (Appendix E) as well as pictorially represented in Appendix F with location for each test pit noted with respect to existing structures; no visible asbestos ore was noted on the surface at the time of sampling. Tetra Tech collected samples from the following six test pits: Story TP-1, Story TP-2, Story TP-3, Story TP-4, Story TP-5, and Story TP-7; Tetra Tech did not collect additional soil samples from Story TP-6 as this test pit only contained engineered 1½-inch minus road base material due to this location's former documented excavation. Test pit logs additionally document different respective soil classifications to depths with which native soil was encountered. Only test pits Story TP-1 through Story TP-3 were documented as containing visible asbestos ore. A pictorial representation of this area along with depths is shown in Appendix A, Figure 7.

Tetra Tech estimates the actual – as represented by visible asbestos ore in each test pit – volume of asbestos ore waste is 122.5 yd³. Tetra Tech estimates the theoretical – as calculated by more qualitative measures using an over-excavation strategy along with adjusting visible ore to match "discovered" asbestos ore in excavation piles and/or other assumed derivations – volume of asbestos ore waste is 227 yd³ and should be considered a more accurate waste volume for this area. With an estimated "bank" volume of 227 yd³, and assuming a 30 percent contingency, this equates to approximately 295 yd³ of asbestos ore "haul" yards. Tetra Tech's calculations are included in Appendix G.

Soil sample results from test pit bases and pit wall composites are presented in Table 5. It should be noted that none of the test pits that were sampled – either from the base samples or the composite samples (when applicable) indicated a detectable concentration of anthophyllite asbestos. Laboratory soil analytical results are located in Appendix H.

TABLE 5: STORY DISTRIBUTING PROPERTY SOIL SAMPLE RESULTS Composite and Base Samples for STORY TP-1 through STORY TP-7					
Test Pit (TP) Sample Number with Soil Classification	Location of Sample*	Sample Depth (FT)	Asbestos Soil Result		
19 – STORY TP-1; Poorly graded dark brown silty sand with gravels	Pit Wall Composite	1.5 – 4*	ND**		
20 – STORY TP-1; Light Brown Clayey Silts w/no or very little gravels	Base	4.0	ND		
21 – STORY TP-2; Poorly graded dark brown silty sand with gravels	Pit Wall Composite	3.5 – 4	1 Structure (Chrysotile)		
22 – STORY TP-2; Light Brown Clayey Silts w/no or very little gravels	Base	4	ND		
23 – STORY TP-3; Poorly graded dark brown silty sand with gravels	Pit Wall Composite	1.5 – 3	ND		
24 – STORY TP-3; Light Brown sandy silt with gravels	Base	3	ND		
26 – STORY TP-4; Duff layer, sandy silt with 6" minus cobbles, dark brown silty sand, light brown sandy silt with gravels	Pit Wall Composite	0 – 3.0	ND		
27 – STORY TP-4; Light Brown sandy silt with gravels	Base	3	ND		
28 – STORY TP-5; Dark brown silty sand and 10-inch minus cobbles, light brown sandy silt with gravels	Pit Wall Composite	0 – 3.0	ND		
29 – STORY TP-5; Light Brown sandy silt with gravels	Base	3	ND		

TABLE 5: STORY DISTRIBUTING PROPERTY SOIL SAMPLE RESULTS Composite and Base Samples for STORY TP-1 through STORY TP-7

Test Pit (TP) Sample Number with Soil Classification	Location of Sample*	Sample Depth (FT)	Asbestos Soil Result
30 – STORY TP-7; 1.5-inch minus road mix, 3-inch minus cobbles with dark brown clayey sand	Pit Wall Composite	0 – 3.0	ND
31 – STORY TP-7; Light Brown sandy silt with gravels	Base	3	ND

^{*} Where no composite sample is located for a specific test pit, the asbestos ore was approximately present to that test pit base depth.

Based on visual evidence of asbestos ore along test pit excavations and randomness of test pit locations, it is Tetra Tech's opinion that all soils along the east side of the Story Distributing building are contaminated with asbestos ore to each respective test pit depth, as noted. All volume calculations have been based on these assumptions. Additionally, it is Tetra Tech's opinion, based on previous site experience, that asbestos ore may need to be remediated further south of the boundary established by this SI. This is due to the sampling methodologies used to determine the nature and extent of anthophyllite ore presence on this property previously.

4.3 Asbestos Air-Related Sampling

Tetra Tech conducted both surficial dust sample collection and occupational air sample collection from December 17 to December 18, 2007, simultaneously, in accordance with referenced methodologies in Section 3.4. The following sections present air sampling results.

4.3.1 Asbestos Dust Sampling

Tetra Tech collected 14 separate dust sample cassettes from the lower level, main level, attic level, and third level of the NHB by a representation of 122 aliquot areas throughout these spaces from porous, semi-porous, and non-porous surfaces. Two samples consisted only of one sample area per cassette primarily due to the presence of only one HVAC zone return air plenum present in the third floor and only one accessible of two possible return plenums along the main floor. Appendix I contains Tetra Tech's asbestos dust sample field log notes from the horizontal dust surface collection process. Additionally, Appendix I provides detailed documentation as to the specific surface types [Non-Porous (NP), Semi-Porous (SP), or Porous (P)] through each separate aliquot sampling point as well as documentation of the different accessibility characteristics with respect to the order with which the aliquot points were sampled. Generally, the aliquot sampling order was followed to include a non-accessible area, infrequently accessed area, and accessible area for the first three aliquot sample points to preclude filter overloading past the first three collected aliquots; however, sampling variability precluded this from occurring for every collected dust sample. Figures 8 - 12 in Appendix A present a pictorial representation of every sample point collection, order of aliquot sample, porosity characteristics and locations of collected samples for both the NHB and SHB in accordance with the established protocol found in Section 3.4.

Analysis of the dust samples indicated no samples had detectable concentrations of asbestos structures. Table 6 provides documentation of the sample results. Appendix J provides documentation for the laboratory analytical data for the dust samples. Tetra Tech's evaluation of the analyzed data indicates that asbestos ore has either been previously removed or not transported into the NHB or SHB. The NHB was built in 1927 and the SHB was added in the

^{**} ND = None Detected based upon 0.25% Target Analytical Sensitivity with CARB 435



CMC BOZEMAN FACILIM TETRATECH SUPPLEMENTAL INVESTIGATION REPORT
JUNE 19, 2008 BY TEACHTECH

JOB NO: 11577200	035	PROJECT NAME:_	CMC Bozeman Fa	acility		
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	_KC/NS	TEST PIT NO.:	Heebs TP-1	
DESCRIPTIVE LOC	CATION: SW corner of Heebs	s building/NE corner				
DATE STARTED:	12-20-07 DATE CO	OMPLETED: 12-20-	07	EXCAVATION CC)MPANY <u>A</u>	CM
TOTAL DEPTH	3.0'					
REMARKS:	Start 0900, sample collected 0)930				
	0079 .jpg					
	Classifica	tion and Description	1			

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
0-0.5	Brown road mix large cobbles with asbestos ore		
0.5 – 1.0	Brown road mix large cobbles with asbestos ore		
1.0 – 1.5	Brown road mix large cobbles with asbestos ore		
1.5 – 2.0	Brown clayey silt		
2 .0– 2.5	Brown clayey silt		
2.5 -3.0	Brown clayey silt		
3.0 base	Brown clayey silt		
	Composite	1.5 – 3.0	
	Base	3.0	
			_



JOB NO: 11577200	035		PROJECT NAME:_	CMC Bozeman	Facility		
STATE: MT	_COUNTY:_(Gallatin	LOGGED BY:	KC/NS	TEST PIT NO	D.: <u>Heebs 1</u>	ГР-2
DESCRIPTIVE LOC	CATION: 1	5' from South of He	ebs building, approx	imately 45 feet fro	om sidewalk cross	ing alley	
DATE STARTED:_	12-20-07	DATE CC	MPLETED: 12-20-	07	EXCAVATIO	N COMPANY_	ACM
TOTAL DEPTH	3.0'						
REMARKS:						sent throughout 80. JPG	test pit. Tes

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
0-0.5	Road mix dark brown with gravel with 5" cobbles.		
0.5 - 1.0	Road mix dark brown with gravel with 5" cobbles. Interface @ 1"		
1.0 – 1.5	Dark Gray Fat Clay		
1.5 – 2.0	Dark Gray Fat Clay		
2 .0– 2.5	Dark Gray Fat Clay		
2.5 -3.0	Dark Gray Fat Clay		
	Dark Gray Fat Clay (Base)	3.0	
	Composite	0 – 3.0	



JOB NO: 1157720	B NO: _1157720035.200 PROJECT NAME: _ CMC Bozeman Facility				
STATE: MT	_COUNTY: <u>Gallatin</u>	LOGGED BY:	KC/NS	TEST PIT NO.:	Heebs TP-3
DESCRIPTIVE LOG	CATION: Approximately 60'	from east sidewalk of	crossing alley (near	Gas Main) and 3' fron	South side of Heebs
DATE STARTED:_	12-20-07 DATE (COMPLETED: 12-20	-07	EXCAVATION COM	MPANY <u>ACM</u>
TOTAL DEPTH	3.0'				
REMARKS:	Approximately 0 - 1.5' depth	visible ore present. N	North side of test pit i 0080 .jr		collection

Donath (foot)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
Depth (feet)		Sample Depth (it)	neadspace (ppm)
0 - 0.5	Road mix dark brown with gravels and 5" cobbles and asbestos ore		
0.5 – 1.0	Road mix dark brown with gravels and 5" cobbles and asbestos ore		
1.0 – 1.5	Dark gray with construction debris – some asbestos ore present		
1.5 2.0	Dark gray Lean clay		
2 .0- 2.5	Dark gray lean clay		
2.5 -3.0	Dark gray lean clay		_
	Dark gray lean clay (Base)	3.0	
	Composite	1.5 – 3.0	
_			



JOB NO: 1157720	035.200	PROJECT NAME:	CMC Bozeman Fac	cility		
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	KC/NS	_TEST PIT NO.:	_ Heebs TP-	-4
DESCRIPTIVE LOC	CATION: Approximately 80' f	rom sidewalk, 15' from	m Heebs			
DATE STARTED:_	12-20-07 DATE C	OMPLETED: 12-20-	-07	_EXCAVATION CO	MPANY	ACM
TOTAL DEPTH	3,					
REMARKS:	Approximately 0-1.5' depth vise Excavation collected using we		sample location.			
	0081 Picture JPG					

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	Road mix dark brown with gravels and 5" minus with asbestos ore		
.5 – 1	Road mix dark brown with gravels and 5" minus with asbestos ore		
1 – 1.5	Road mix dark brown with gravels and 5" minus with asbestos ore		
1.5 – 2	Lean clay, dark gray		
2-2.5	Lean clay, dark gray		
2.5 – 3	Lean clay, dark gray		
	Lean clay, dark gray (Base)	3	
	Lean clay, dark gray (Base Duplicate)	3	
	Composite	1.5 - 3	



JOB NO: 11577200	035.200	PROJECT NAME:_	CMC Bozeman Fac	ility	
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	KC/NS	_TEST PIT NO.:Hee	ebs TP-5
DESCRIPTIVE LOC	CATION: Approximately 100'	from side walk, 3' from	m Heebs South buildi	nq	
DATE STARTED:	12-29-07 DATE CO	OMPLETED: <u>12-29-</u> 0	07	_EXCAVATION COMPAN	NYACM
TOTAL DEPTH	3'				
REMARKS:	0-1.5' depth visible ore. North side wall sample location	1.			
	Collected using wet methods 0082 Picture JPG				

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	Road mix dark brown with gravels and 5" minus with asbestos ore		
.5 – 1	Road mix dark brown with gravels and 5" minus with asbestos ore		
1 – 1.5	Road mix dark brown with gravels and 5" minus with asbestos ore		
1.5 – 2	Lean clay, dark gray		
2 – 2.5	Lean clay, dark gray		
2.5 – 3	Lean clay, dark gray		
	Lean dark gray clay (Base)	3	
	Lean dark gray clay (Base Duplicate)	3	
	Composite	1.5 - 3	
_		_	



JOB NO: 11577200	035	PROJECT NAME:_	CMC Bozeman Fac	ility		
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	KC/NS	_TEST PIT NO.:	SHB TP-1	
DESCRIPTIVE LOC	CATION: SHB North Test Pit	against NHB north do	ock wall			
DATE STARTED:_	12-19-07 DATE CC)MPLETED: 12-19-(07	_EXCAVATION COM	MPANY	ACM
TOTAL DEPTH	4'					
REMARKS:	1000 – start, 1005 called/left m * Small hole made in building fi * done at 11:10, put surface a	rom contractor		per.		
	0004 FICIUIE JEG					

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	Poorly graded medium brown sand with gravels and cobble up to approximately 7"		
.5 – 1	Poorly graded medium brown sand with gravels and cobble up to approximately 7" with visible asbestos ore		
1 – 1.5	Poorly graded medium brown sand with gravels and cobble up to approximately 7" with visible asbestos ore		
1.5 – 2	Poorly graded medium brown sand with gravels and cobble up to approximately 7" with visible asbestos ore		
2-2.5	Poorly graded medium brown sand with gravels and cobble up to approximately 7" with visible asbestos ore		
2.5 – 3	Poorly graded medium brown sand with gravels and cobble up to approximately 7" with visible asbestos ore		
3.0 – 3.5	Poorly graded medium brown sand with gravels and cobble up to approximately 7" with visible asbestos ore		
3.5 – 4.0	Dark brown clayey silts (looks native) no/very little gravels		
	Dark brown clayey silts no/very little gravels (Base)	4.0	



JOB NO: 1157720035	PROJECT NAME:_	CMC Bozeman Faci	lity	
STATE: MT COUNTY: Gallatin	LOGGED BY:	KC/NS	_TEST PIT NO.:	SHB TP-2
DESCRIPTIVE LOCATION: 20' South of SHB-TP	21			
DATE STARTED: 12-19-07 DATE CO	MPLETED: <u>12-19-0</u>	07	_EXCAVATION COM	1PANYACM
TOTAL DEPTH				
REMARKS: 11:15 1140 start testpit/backfille visible evidence of asbestos ore Soil wet during excavation 0074 Picture JPG				

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	South side wall, 12" minus with sandy soil poorly graded sand with gravels non-native fill		
0.5 – 1	South side wall, 12" minus with sandy soil poorly graded sand with gravels non-native fill		
1 – 1.5	South side wall, 12" minus with sandy soil poorly graded sand with gravels non-native fill		
1.5 – 2.0	South side wall, 12" minus with sandy soil poorly graded sand with gravels non-native fill		
2.0 – 2.5	South side wall, 12" minus with sandy soil poorly graded sand with gravels non-native fill		
2.5 – 3.0	South side wall, 12" minus with sandy soil poorly graded sand with gravels non-native fill		
_	Dark brown clayey silt (Base)	4	
	Composite	1 - 3	
	Duplicate of Composite	1 - 3	



JOB NO: 11577200	035.200	PROJECT NAME:_	CMC Bozeman Fac	cility	
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	KC/NS	_TEST PIT NO.:	SHB TP-3
DESCRIPTIVE LOC	CATION: Approximately 40' S	South from NHB East	dock		
DATE STARTED:_	12-19-07 DATE CO	OMPLETED: 12-19-	07	_EXCAVATION CON	MPANY <u>ACM</u>
TOTAL DEPTH	2.5'				
REMARKS:	Started 1315 Finished Excava Wet Methods used during exc		5		
	visible asbestos ore present 0	-2.5'			
	0076 Picture JPG				

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	South side wall 10" – minus with sandy soil poorly graded sand with gravels – visible asbestos ore		
0.5 – 1	South side wall 10" – minus with sandy soil poorly graded sand with gravels – visible asbestos ore		
1.0 – 1.5	South side wall 10" – minus with sandy soil poorly graded sand with gravels – visible asbestos ore		
1.5 – 2.0	South side wall 10" – minus with sandy soil poorly graded sand with gravels – visible asbestos ore		
2.0 – 2.5	South side wall 10" – minus with sandy soil poorly graded sand with gravels – visible asbestos ore		
	Dark brown clayey silts (looks native) no/very little gravels (Base)	2.5	



STATE: MT COUNTY: Gallatin LOGGED BY: KC/NS TEST PIT NO.: S	SHB – TP-4
DESCRIPTIVE LOCATION: 60' from South side of East NHB dock (towards City of Bozeman Library)	
DATE STARTED: 12-19-07 DATE COMPLETED: 12-19-07 EXCAVATION COMP	PANY <u>ACM</u>
TOTAL DEPTH4'	
REMARKS: Start 1400, stop 1430 (backfill) South side wall samples 0075 .jpg	

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	Poorly graded sand with gravels and cobbles up to 10"		
.5 – 1	Poorly graded sand with gravels and cobbles up to 10"		
1 – 1.5	Poorly graded sand with gravels and cobbles up to 10"		
1.5 – 2	Poorly graded sand with gravels and cobbles up to 10"		
2 – 2.5	Poorly graded sand with gravels and cobbles up to 10"		
2.5 – 3	Poorly graded sand with gravels and cobbles up to 10"		
3 – 3.25	Visible asbestos ore present at interface		
	Dark brown clayey silts, little to no gravels (Base)	4	
	Composite	1 - 3	



JOB NO: 11577200	035.200	PROJECT NAME:_	CMC Bozeman Fac	cility	
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	KC/NS	_TEST PIT NO.:	SHB TP-5
DESCRIPTIVE LOC	CATION: 80' South of East N	HB Dock			
DATE STARTED:_	12-19-07 DATE CO	OMPLETED: 12-19-	07	_EXCAVATION COM	MPANY <u>ACM</u>
TOTAL DEPTH	2.5"				
REMARKS:	Start 1445, stop 1520 (backfill Asbestos ore noted in test pit d		of concrete footing of	building	
	.0077 JPG				

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
- 05	South wall poorly graded sand with gravels and cobbles up to 10"		
.5 – 1	South wall poorly graded sand with gravels and cobbles up to 10"		
1 – 1.5	South wall poorly graded sand with gravels and cobbles up to 10"		
1.5 – 2	South wall poorly graded sand with gravels and cobbles up to 10"		
2 – 2.5	South wall poorly graded sand with gravels and cobbles up to 10"		
	Composite	0 – 2.5	
	Dark brown clayey silts little to no gravels (Base)	2.5	



JOB NO: 11577200	035	PROJECT NAME:_	CMC Bozeman I	acility		
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	KC/NS	TEST PIT NO.:	SHB TP-	6
DESCRIPTIVE LOC	CATION: SHB SE corner of b	uilding				
DATE STARTED:	12-19-07 DATE CO	MPLETED: 12-19-0)7	EXCAVATION CO	DMPANY	ACM
TOTAL DEPTH	2.5"					
REMARKS:	Start 1530, stop 1600 East side wall only 1' into boun	dary area visible ore	present.			
	0078 Photo JPG					
	Classificat	ion and Description				

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
0.5 – 1	Visible ore mixed with poorly graded sand with gravels with 10" minus boulders with asbestos ore		
1 – 1.5	Visible ore mixed with poorly graded sand with gravels with 10" minus boulders.		
1.5 – 2	Visible ore mixed with poorly graded sand with gravels with 10" minus boulders.		
2 – 2.5	Visible ore mixed with poorly graded sand with gravels with 10" minus boulders.		
	Dark brown clayey silts – little to no gravels	2.5	
_			-



JOB NO: 1157720035 PROJECT NAME: CMC Bozeman Facility						
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	KC/RWE	_TEST PIT NO.:	Story TP-1	
DESCRIPTIVE LOC	CATION: Approximately 15's	south of SE SHB build	ding corner			
DATE STARTED:	12-28-07 DATE C	OMPLETED: 12-28-	-07	_EXCAVATION COM	MPANY <u>A</u>	ACM
TOTAL DEPTH	4'					
REMARKS:	1145 Start 1200 – backfilled	at 1230				
	0084 Picture JPG					

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	Duff layer with gravels, asbestos ore present		
.5 – 1	Gravels with sandy soils 6" minus , asbestos ore present		
1 – 1.5	Gravels with sandy soils 6" minus with cobbles, asbestos ore present		
1.5 – 2	Dark brown silty sand with gravels		
2 – 2.5	Dark brown silty sand with gravels		
2.5 – 3	Dark brown silty sand with gravels		
3.0 – 3.5	Sandy light brown silt with gravels		
3.5 – 4.0	Sandy light brown silt with gravels		
	Composite	1.5 -4.0	
	Sandy light brown silt with gravels (Base)	4.0	



JOB NO: 11577200	OB NO: <u>1157720035.200</u> PROJECT NAME: <u>CMC Bozeman Facility</u>				
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	KC/RWE	_TEST PIT NO.:	Story TP-2
DESCRIPTIVE LOC	CATION: 20' from SE corner	of Harrington S. Build	ding., 15' S of SHB B	uilding	
DATE STARTED:_	12-28-07 DATE C	OMPLETED: 12-28-	.07	_EXCAVATION COM	PANYACM
TOTAL DEPTH	4'				
REMARKS:	1225 – 1245, 1300 backfill				
	Excavation conducted using v	vet methods			
	0086 Picture JPG				

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	Duff layer with gravels – visible asbestos ore		
.5 – 1	Sandy layer 6" minus cobbles – visible asbestos ore		
1 – 1.5	Sandy layer 6" minus cobbles– visible asbestos ore		
1.5 – 2	Sandy layer 6" minus cobbles- visible asbestos ore		
2 – 2.5	Sandy layer 6" minus cobbles– visible asbestos ore		
2.5 – 3	Old duff layer with gravels – visible asbestos ore		
3 – 3.5	Old duff layer with gravels – visible asbestos ore		
3.5 – 4	Light brown sandy silt with gravels		
	Light brown sandy silt with gravels (Base)	4	
	Composite	3.5 - 4	



JOB NO: 1157720035.200 PROJECT NAME: CMC Bozeman Facility					
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	KC/RWE	_TEST PIT NO.:	Story TP-3
DESCRIPTIVE LOC	CATION: Approximately 40' V	V of SE corner of SHE	3		
DATE STARTED:	12-28-07 DATE CO	OMPLETED: 12-28-0	07	_EXCAVATION CON	IPANY <u>ACM</u>
TOTAL DEPTH	3'				
REMARKS:	Start excavation 1200, 1215 ex	xcavation finished 125	50 backfill		
	Wet methods used during exca	avation			
	Visual asbestos ore 0 - 1.5'				
	0085 Picture JPG				

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	Duff with sandy gravels 6" minus cobbles, Asbestos ore present		
.5 – 1	Sandy gravels 6" minus cobbles, Asbestos ore present		
1 – 1.5	Sandy gravels 6" minus cobbles, Asbestos ore present		
1.5 – 2	Light brown sandy silt with gravels		
2 – 2.5	Light brown sandy silt with gravels		
2.5 – 3	Light brown sandy silt with gravels		
	Light brown sandy silt with gravels (Base)	3	
	Composite	1.5 – 3	
	Composite Duplicate	1.5 – 3	
_			



JOB NO: 11577200	035.200	PROJECT NAME:_	CMC Bozeman Fac	ility		
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	KC/RWE	_TEST PIT NO.:	Story TP-	4
DESCRIPTIVE LOC	CATION: Near power pole on	SW corner of SHB				
DATE STARTED:	12-28-07 DATE CO	OMPLETED: 12-28-	07	_EXCAVATION CO	MPANY	ACM
TOTAL DEPTH	3'					
REMARKS:	Started 1315, 1345 Stop. No visible asbestos ore					
	Excavation conducted using w	ret methods				
	0087 Picture JPG					

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	Duff layer with gravels		
0.5 – 1	Sandy layer 6" minus with cobbles		
1.0 – 1.5	Sandy layer 6" minus with cobbles		
1.5 – 2.0	Dark brown silty sand		
2.0 – 2.5	Dark brown silty sand		
2.5 - 3.0	Light brown sandy silt with gravels		
	Light brown sandy silt with gravels	3	
	Composite	0 - 3	



JOB NO: 1157720	035.200	PROJECT NAME:_	CMC Bozeman Fac	ility		
STATE: MT	_COUNTY: Gallatin	_LOGGED BY:	KC/RWE	_TEST PIT NO.:	Story TP-5	
DESCRIPTIVE LOC	CATION: SW corner of SHB	15' from S and 20' W				
DATE STARTED:_	12-28-07 DATE CO	OMPLETED: 12-28-	07	_EXCAVATION COM	MPANY <u>AC</u>	М
TOTAL DEPTH	3'					
REMARKS:	Started 1700, finished 1725 B	ackfilled at 1820				
	Collected using wet methods 0089 Picture JPG					

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	Sandy with gravels and 10" minus and cobbles		
0.5 – 1	Sandy with gravels and 10" minus and cobbles		
1.0 – 1.5	Sandy with gravels and 10" minus and cobbles		
1.5 – 2.0	Sandy with gravels and 10" minus and cobbles		
2.0 – 2.5	Dark brown clayey sand		
2.5 - 3.0	Light brown sandy silt with gravels		
	Light brown sandy silt with gravels (Base)	3	
	Composite	0 - 3	
	·		



JOB NO: 11577200	035.200	_ PROJECT NAME:	CMC Bozeman F	acility	
STATE: MT	_COUNTY:_Gallatin	LOGGED BY:	KC/RWE	TEST PIT NO.:	Story TP-6
DESCRIPTIVE LOC	CATION: 15' S, 40'	W of SE corner of SHB			
DATE STARTED:	12-28-07	_DATE COMPLETED:12-28	3-07	EXCAVATION COM	MPANYACM
TOTAL DEPTH	Excavation to 1.5'				
REMARKS:	Engineered Road B	ed in same locale as previous	test pit exploration a	and soil removal with e	ncapsulation. Colleen
Owen indicated to	previous data from	past excavations in area co	oupled with onsite r	eference of new asph	alt indicates previous
excavation in area o	of test pit.				
	0070 Picture JPG				
					<u> </u>

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
05	Engineered 1 1/2 " minus road base material with fines		
.5 – 1	Engineered 1 1/2 " minus road base material with fines		
1 – 1.5	Engineered 1 1/2 " minus road base material with fines		



JOB NO: 1157720	0035.200	PROJECT NAME:_	CMC Bozeman Fac	ility	
STATE: MT	_COUNTY:_Gallatin	_LOGGED BY:	KC/RWE	_TEST PIT NO.:	Story TP-7
DESCRIPTIVE LO	CATION: 40' W of SW corner	of SHB			
DATE STARTED:_	12-28-07DATE CO	OMPLETED: 12-28-0	07	_EXCAVATION COM	IPANY <u>ACM</u>
TOTAL DEPTH	3'				
	Start 1330. Finish 1630. No Backhoe bucket could not scr				
	etrate soil. Provided continuous	wetting of soil through			

Depth (feet)	Classification and Description	Sample Depth (ft)	Headspace (ppm)
0 – 0.5	1.5" graded road mix		
0.5 – 1.0	1.5" graded road mix		
1.0 – 1.5	1.5" graded road mix		
1.5 – 2.0	3' Minus cobbles with dark brown clayey sand.		
2.0 – 2.5	3' Minus cobbles with dark brown clayey sand.		
2.5 – 3.0	3' Minus cobbles with dark brown clayey sand.		
	Light brown sandy silts with gravels	3.0 Bottom	
	Composite	0 - 3.0	
_			

Voluntary Cleanup Plan for the CMC East Main Depot

By RESOURCE TECHNOCOME

4.7.1.8. 2001 Due Diligence Site Investigation

On behalf of the Bozeman Public Library Board of Trustees, RTI performed a due diligence site investigation and prepared the *Due Diligence Site Investigation –Investigation Methods and Results Report* (RTI, 2001a) and the *Findings and Recommendations Report* (RTI, 2001b). The entire 14-acre property was investigated. Investigation activities included supplemental interviews, a geophysical survey, installation of 5 soil boreholes (all within the facility boundary), excavation of 59 test pits (40 of which were within or adjacent to the facility boundary), and installation of 6 groundwater monitoring wells and three observation wells (all within or adjacent to the facility boundary).

Soil sample analyses included: asbestos (5 samples); RCRA metals (35 samples); extractable petroleum hydrocarbon (EPH) screening (36 samples); SVOCs and/or PAHs (9 samples); PCBs (14 samples); dioxins/dibenzofurans (7 samples); and VOCs (1 sample).

On February 28 and March 1, 2001 groundwater samples were collected from the six monitoring wells and one of the observation wells. Groundwater samples were analyzed for asbestos, RCRA metals, VOCs, EPH screen, and PCBs. Groundwater samples were also collected during high groundwater on July 24, 2001 from MW-4 and MW-6. These samples were analyzed for EPH screen and lead.

4.7.1.9. 2002 Background Arsenic Investigation

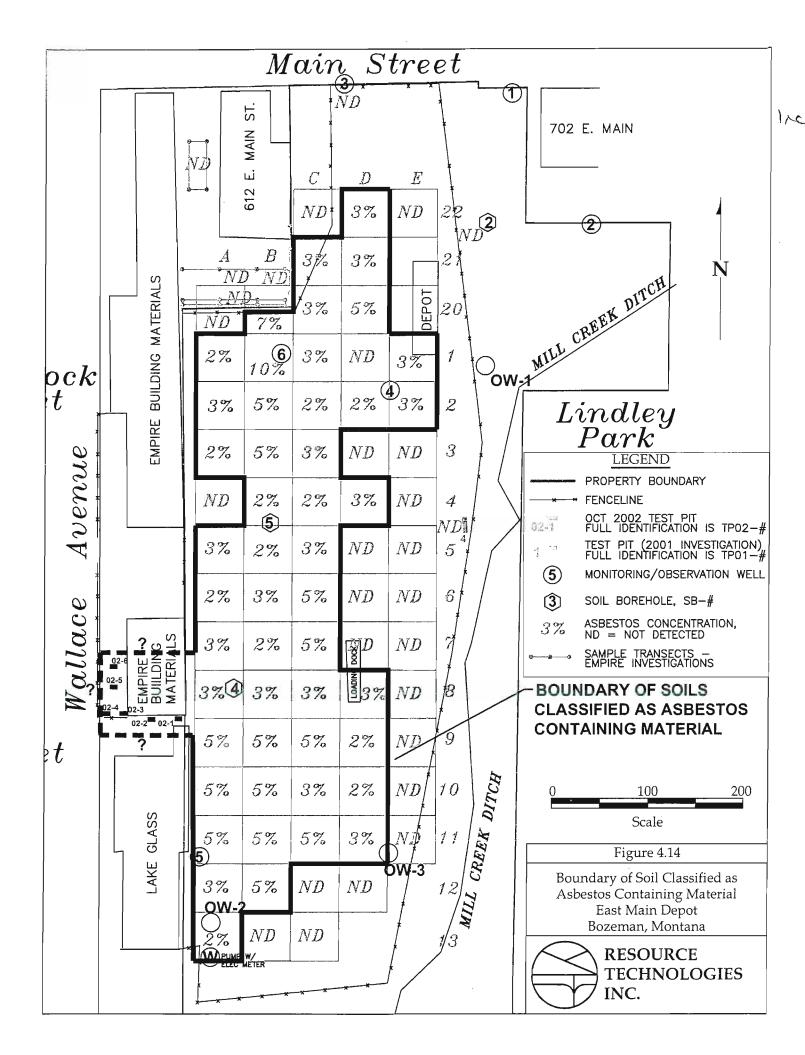
In April 2002, twenty soil samples were collected from surface soils (0 to 4 inches deep) from property adjacent to the facility. Ten samples were collected from Lindley Park and 10 from areas south of the facility including lower slopes of Peets Hill, along Mill Creek Ditch, and within the former CMC property south of the facility. The samples were submitted for arsenic analysis to establish background arsenic concentrations for the purpose of developing a cleanup goal for arsenic.

4.7.2. Investigation Results Summary

Cumulative results of investigations referenced in the previous section are summarized below. Results for each contaminant or group of contaminants of concern are discussed individually.

4.7.2.1. *Asbestos*

Materials containing greater than 1 percent asbestos or visible asbestos are regulated asbestos containing materials (RACM). Figure 4.14 presents the limits of detected asbestos concentrations in excess of 1 percent in soils or visible asbestos. The extent of asbestos contamination was first defined during the 1991 Hydrometrics investigation and the asbestos was identified as anthophyllite. In 1993 and 1998, investigations of the 612 E. Main Street property were performed on behalf of Empire Building Materials Inc. (Schafer & Associates, 1993 and 1998) and determined that soils on that property were not RACM. In October 2002, investigation of properties located on South Wallace Avenue confirmed the presence of visible asbestos ore in soil in test pit TP02-2 at a depth of approximately 2 feet and test pits TP02-3 through TP02-6 at depths of between 6 to 12 inches. No asbestos structures were detected in a composite sample of surface soil collected from the Empire Building Materials yard demonstrating there is no imminent risk from the RACM on these properties. The extent of RACM in this area was not defined.



August 28, 2007

Jim Maus Tetra Tech, Inc. 303 Irene Street Helena, MT 59601

Subject: Task Order No. 612

Request for Work Plan for Conducting Asbestos Cleanup Activities

Main Street - Bozeman; STPP 50-2(43)89; CN 4312

MDT Environmental Services is requesting Tetra Tech, Inc. prepare a brief work plan and cost estimate for removing and disposing of approximately 250 cubic yards (cy) of asbestos-contaminated soils from an area adjacent to the parking lot at the City of Bozeman softball fields located on Haggerty Lane.

MDT is currently reconstructing Main Street in Bozeman. This project includes milling/filling the roadway, sidewalk upgrades, and new signals. During this project, MDT's contractor discovered anthophyllite asbestos in the fill material beneath the sidewalk at the southwest corner of Main Street and Wallace Avenue. It is believed that this material originated from the Karst Mine, which is located in Gallatin Canyon. Approximately 10-15 cy of asbestos-contaminated soils were removed from this corner before MDT realized asbestos was present. This material was taken to the parking lot area at the City of Bozeman softball fields located on Haggerty Lane. MDT stopped all work at this corner after discovering asbestos and hired Abatement Contractors of Montana (ACM) to conduct initial cleanup activities.

ACM removed approximately 18 cy of asbestos-contaminated soils from southwest corner of Main Street and Wallace Avenue to reach the depth necessary to construct the sidewalk. These soils were disposed of at Allied Waste in Missoula. Anthophyllite asbestos was still visible in the bottom of the excavation and along the southern sidewalls (adjacent to Heebs Food Center parking lot) following excavation activities. I collected a 10-point composite soil sample from the bottom of the excavation. This sample contained 12% anthophyllite asbestos. The excavation was then backfilled with approximately 8 cy of flowable fill and the sidewalk work was completed.

ACM also removed approximately 27 cy of asbestos-contaminated soils from the parking lot area at the City of Bozeman softball fields. These soils were disposed of at Allied Waste in Missoula. ACM focused their efforts in the NE corner of the stockpile. This is the area where the material from the contaminated corner was placed. It is believed that ACM removed the majority of the "source-area soils" but there were still asbestos fragments/shards visible throughout the fenced-off area. I collected a 5-point composite surface soil sample from each of the four quadrants of the remaining stockpile. The northwest, northeast, and southeast corners contained 5% anthophyllite asbestos; and the southwest corner contained 2% anthophyllite asbestos. ACM fenced off the stockpile area and placed a tarp over the soils. I have attached two (2) photographs of the asbestos-contaminated soils at the City of Bozeman property.

The scope of work for this task order includes the following:

Environmental Services Phone: (406) 444–7228 Fax: (406) 444–7245

- Removing approximately 250 cy of asbestos-contaminated soils from the parking lot area at the City of Bozeman softball fields located on Haggerty Lane. (Please note: The total volume of soil requiring removal may be more (or less) depending on visual observations during excavation activities and confirmation sample results.)
- Transporting and disposing of the asbestos-contaminated soils at a licensed disposal facility
 that accepts this type of material. The City of Bozeman landfill may accept this material,
 which should be our preferred disposal facility. We should assume that this material is
 friable.
- Collecting confirmation soil samples from the bottom of the excavation to verify that all asbestos-contaminated soils have been removed. These results may be used to guide additional excavation activities, if asbestos is still present.
- Preventing the release of asbestos fibers during excavation, transportation, and disposal activities.
- Utilizing the appropriate PPE during cleanup activities.
- Providing air monitoring during construction activities, as necessary.
- Locating utilities prior to any excavation activities.
- Obtaining the appropriate permit(s) from DEQ.
- Preparing a brief report documenting cleanup activities, soil sample results, etc.

If you have any questions regarding this letter, please give me a call at 444-6003.

Doug Compton, P.E. Environmental Engineer

Attachment A – Photographs

cc: Jim Jewett, Bozeman Construction
Kraig McLeod, Consultant Design
Stan Sternberg, Environmental Services

Attachment A
Photographs

Environmental Services Phone: (406) 444–7228 Fax: (406) 444–7245 Web Page: www.mdt.state.mt.us Road Report: (800) 226–7623 TTY: (800) 335–7592

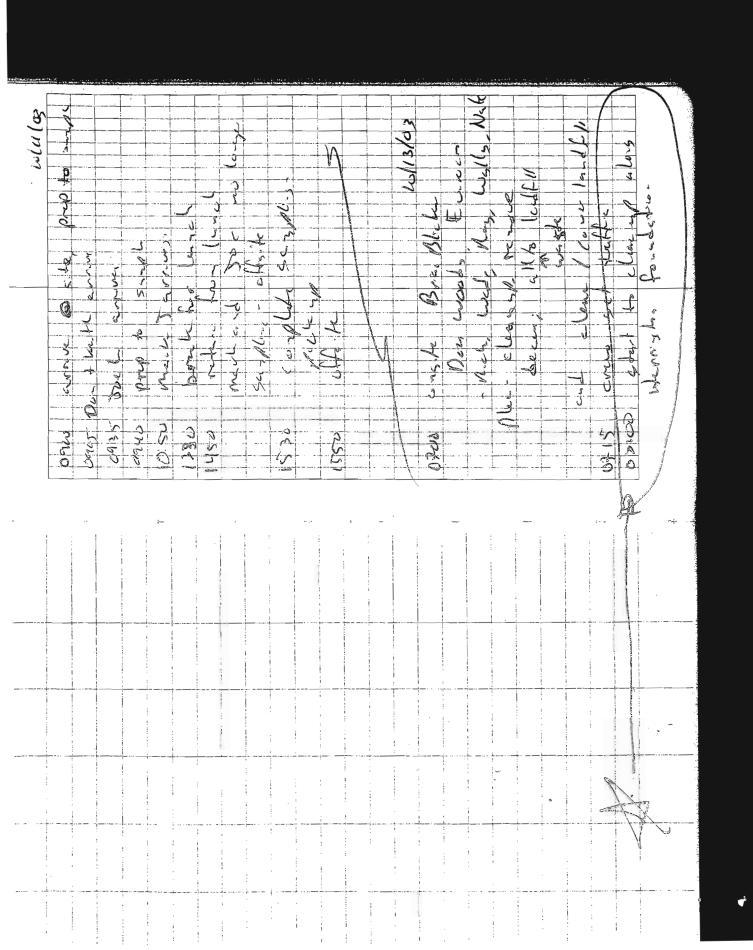


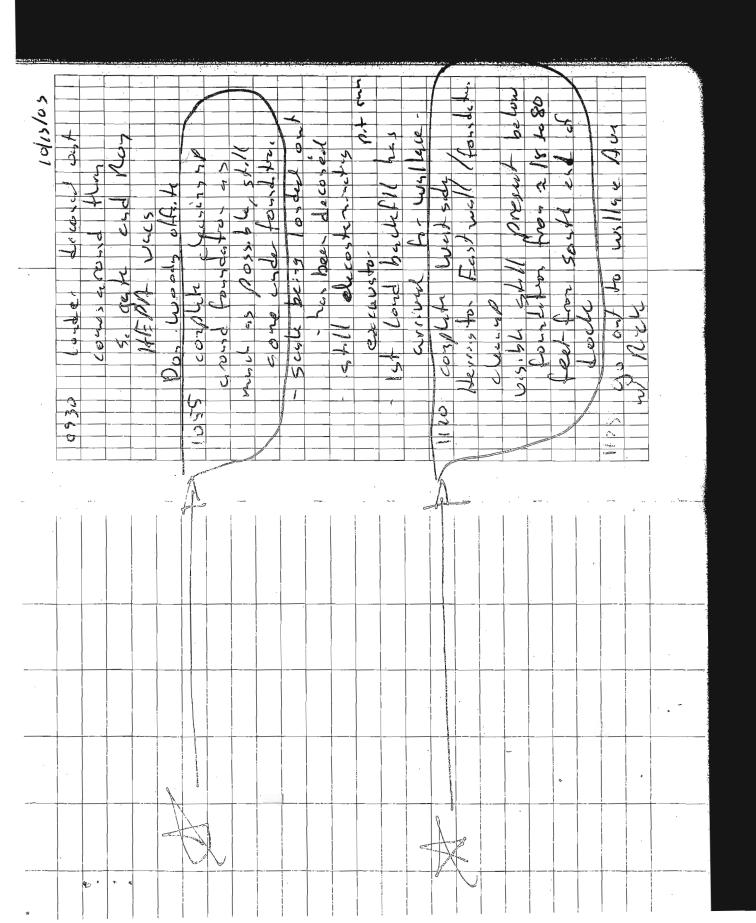
Photograph 1 – View of the asbestos-contaminated soils from the northwest.



Photograph 2 – View of the asbestos-contaminated soils from the north.

Environmental Services Phone: (406) 444–7228 Fax: (406) 444–7245





all his part Crew dearing execusion 54-11 50-12-8 had you decen 10/1301 Com in white banks Malmar and Scool Mark Derryko arow GEC 1. 12/ 5 62 50 18 D.J. Mur Dlaced Rx Execular 1. L. Clean Zung 5 29/20 シング 1.2 BRd. 2 Visit decidence heallage me ないいとう 古る でんない V-8 204 79 8.50 R 37 55 Pag 15/235 1450 B 247 2 3/0

10/11/01 3 Ū CO 35 0 Bach 10 Send 100 ALT 32 75 1/2 ٠<u>۵</u> CITY ر ح Land 611-1477 ئے 7 2 2 3 7 2 de de fre-a 1242 r L × 12 C-121 > 3 Shah 420 ۸. دره کړ 0458 Un 1/1/1 1000 m 7070 1 SC 12/0 2 Und 212 3 300 213156 - 6611 Q >>< > 2 2 2 ٩ 2)-5 3 000 1630 735 3000 7 25

APPENDIX C ACCESS AGREEMENTS

RECEIVED

AUG 15 2008

TETRA TECH GREAT FALLS, MT

EMPIRE BUILDING MATERIALS 608 East Main Street Bozeman, Montana 59715

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requests the written consent of current property owners to be included as part of a voluntary cleanup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Quality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional cleanup is needed, a Supplemental Investigation of asbestos-containing ore in and along your property must be completed.

Along the exterior of your property we request access to collect test pit samples along the west, south, and east portions of your property. Potentially, along the interior of your building, we request access to collect air and surficial dust samples.

Section 75-10-733(2)(c), MCA, requires that voluntary cleanup plans must include, "The written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

As a property owner o	of Empire	Building	Materials,	Inc.,	as	described	below,	I
MickONO			provid	le cons	ent	for the imple	ementati	ior
of this voluntary clearup p	lan propos	ed for the	facility as ap	prove	d by	DEQ. I fu	rther gra	an
access to that portion of th	ne facility is	mpacted by	y asbestos c	ontam	inat	tion, to Teti	a Tech,	its
agents, and DEQ.								

The LEGAL PROPERTY DESCRIPTION for this Property is set forth in the attached Real Estate Contract, dated December 7, 1970 and Quitclaim Deed dated December 3, 1971.

Empire Building Materials, Inc.
608 East Main Street
Bozeman, Montana 59715
JEZ-
Signature(s)
Rick Ople V. Trus.
Name/Title (please print)
8/8/08
Date: August 8 2008

511 EAST BASCOCK ACCESS AGREEMENT

Samuel B. Fiance, GRANTOR, for valuable considerations, receipt of which is acknowledged, grants to The City of Bozeman, a municipal corporation of the State of Montana, with offices at 121 North Rouse, Bozeman, Montana 59715. GRANTEE, its successors and assigns, access to the alley way situated in Gallatin County, Montana, located on the following described real property: Rouses 1st BOZ Sec 7 2S 6E Lot 25 & E 26 ½. Lot 26 BLK B. This grant includes the right of the GRANTEE, its successors and assigns, and its agents and employees, to enter upon the above-described land by using existing access and egress points or otherwise by a route causing the least amount of damage and inconvenience to the GRANTOR in order to conduct removal and remediation of contaminated soils. I provide consent for the implementation of this voluntary cleanup plan proposed for the facility as approved by the DEQ. I further grant access to the facility to Tetra Tech, its agents, and DEQ. The GRANTEE agrees that, in connection with the removal and remediation activities it will repair or replace, at its sole expense, or pay to GRANTOR the reasonable value of any damages to growing crops, existing fences and other appurtenances of said land that may be disturbed by its operation.

that, in connection with the removal and reme	ech, its agents, and DEQ. The GRANTEE agrees diation activities it will repair or replace, at its sole value of any damages to growing crops, existing at may be disturbed by its operation.
DATED this 6 day of OCTO	BOR , 2008
	By: Sund B France
	Samuel B. Fiance, Grantor
STATE OF MONTANA)	
County of Gallatin)	
Public for the State of Montana, personally ap	
	eunto set my hand and affixed my Notarial Seal the
day and year first above written.	
(SEXL) - 31.5 Million	Treather France ner
《公司》	Notary Public for the State of Montana
S. C.	Heather Bienvenue
	Residing at Bozeman, MT

My Commission Expires: January 26, 2010

	03	r > 4		m, m		•
Δ	1	(`I	~4	1.2	1.0	D:
()	X.	V.			. L.	◡,

CITY OF BOZEMAN
by ANNA RESUMERY
Acting City Manager

ATTEST:

City Clerk

STATE OF MONTANA

)ss. County of Gallatin)

IN WITNESS WHEREOF. I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

TOTA OF MONTH AND THE MENTING AND THE MENTING

Notary Public for the State of Montana

Heather Bienvenue

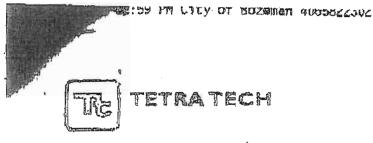
Residing at Bozeman, Montana

My Commission Expires: January 26, 2010

eraets.eudroeudratent

國 001/001

66/ 2



WRITTEN CONSENT OF PROPERTY OWNERS FOR VOLUNTARY PROPERTY ACCESS TO:

503 East Babcook - Mose Point

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requires the written consent of current property covers to be included the part of a valuntary deamup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Cuality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional eleanup is needed, a Supplemental investigation of asbested-containing one in and along your property must be completed.

Section 75-10-733(2)(c), MOA requires that voluntary cleanup plans must include, "The written consent of current owners of the facility of property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

As a properly ewher of 503 East Baboock as described below, I. <u>David Cecich</u>. Limited Partner, provide consent for the implementation of this voluntary electup plan proposed for the facility as approved by DEQ. I further grant posses to the facility to Tetra Tech, its against, and DEQ. *

Rouses 1st Box Sec 7 25 BE W 11/2' Lot 28 gillot 27 and 28 Block B

Maose Point LP

3612 35th Avenue SW

Seattle, WAV88126

Stanzous(a)

DAVID Cocich Limited TARTHER

Name/Title (please prim)

9-29-08

Carlo

*This Consent is not effective unless and until the City of Bozeman executes the attached Addendum to Written Consent Regarding 503 East Babcock. |ariowstonecipnerstesie

M 002/004

ADDENDUM TO WRITTEN CONSENT REGARDING 503 EAST BABCOCK

This Addendum to Written Consent Regarding 503 East Babcock (the "Addendum") is required for the consent given by the property owner of 503 East Babcock (the "Property") to become effective. In consideration of the consent by the property owner, the City of Bozeman (the "City") hereby agrees as follows:

- 1. The City intends to enter upon the Property to drill test holes as necessary, to attempt to determine the presence of asbestos or other contaminants solely within boundary of the alleyway within the city block containing the Property, and which lies immediately north of the Property. The City will repair and replace damage done to the alleyway by virtue of this testing as soon as reasonably possible, at its expense, the City and the Property owner acknowledging and agreeing that the Property owner uses the alleyway to access the Property.
- 2. In the event asbestos or other conteminants are found as a result of the testing described in the preceding paragraph, the City is authorized to do the work necessary to remove the contaminant from within the alleyway. In the event such removal is necessary, the City agrees, at its expense to return the alleyway, to the condition as it existed before any testing or remediation pursuant to this paragraph, as quickly as reasonably possible after the remediation is complete.
- 3. To the extent the City's actions with its testings or remediation damages or effects in any technion the Property, the City agrees, at its sole expense, to repair all such damage and to bring the Property to the state it enjoyed before any disturbance due to testing and remediation.
- 4. Nothing in the Written Consent permits the City to place equipment or vahicles on the Property, or to mobilize for any activity on the Property.
- 5. The City acknowledges that Property owner will utilize the remainder of the Property unaffected by the City's activity in testing and remediation.
- 6. The City agrees to give notice to Property ewner of its Intention to enter onto the Property as much in advance as possible, so that Property owner may advise its tenants and clients about activity on the Property.

Addendum to Written Consent Page 1 CHILDIESTO IN. VO IAM TOU DOD DIEG

INITHAPINURCTUURLZJEBTE

W 003/004

7. The Property owner and the City agree that facsimile alignatures may be treated as originals in connection with the Written Consent and this Addendum.

Deted this 674 day of October, 2008

CITY OF BOZEMAN

ts: City/Manager

MOOSE POINT, L.P. A Montana Limited Partnership

By: BURGIE MANAGEMENT COMPANY, L.L.C.

A Montane Limited Liability Company

General Partner

By: THE CECICH FAMILY 1986 TRUST

Dated November 18, 1986, as amended

Sole Member of Burgie Management Company, L.L.C.

DAVID K. CECICH, Co-Trustee

Addendum to Written Consent Page 2



549 East Babcock - Manishnsing Develoners

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requires the written consent of current property owners to be included as part of a voluntary cleanup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Quality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional cleanup is needed, a Supplemental Investigation of asbestos-containing ore in and along your property must be completed.

Section 75-10-733(2)(c), MCA requires that voluntary cleanup plans must include, "The written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

Rouses 1st Boz SEC 7 2S 6E Lots 15 thru 16 Block B

Mountainside Development
18 East 4th St.
Cincinnati OH 45202

Signature(s)

Name/Title (please print)

541 East Babcock - MOUNTH NOTICE DEVELOPMENT

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requires the written consent of current property owners to be included as part of a voluntary cleanup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Quality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional cleanup is needed, a Supplemental Investigation of asbestos-containing ore in and along your property must be completed.

Section 75-10-733(2)(c), MCA requires that voluntary cleanup plans must include, "The written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

As a property owner of 541 East Babcock as described below, I, _______, provide consent for the implementation of this voluntary cleanup plan proposed for the facility as approved by DEQ. I further grant access to the facility to Tetra Tech, its agents, and DEQ.

Rouses 1st Boz Sec 7 2S 6E Lot 17 and 18 Block B

Mountainside Development LLC 18 East 4 th St. Cincinnati, OH 45202	
781-7-7C-	
Signature(s)	
TOGER F. IHESWIG	
Name/Title (please print)	
9-30-08	
Date	_

HARRINGTON'S INC. PROPERTY

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requests the written consent of current property owners to be included as part of a voluntary cleanup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Quality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional cleanup is needed, a Supplemental Investigation of asbestos-containing ore in and along your property must be completed.

Section 75-10-733(2)(c), MCA, requires that voluntary cleanup plans must include, "The written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

As a property owner of HARRINGTON'S INC. described below, I, being the President of Harrington's Inc., a Montana corporation, provide consent for the implementation of this voluntary cleanup plan proposed for the facility as approved by DEQ. I further grant access to the facility to Tetra Tech, its agents, and DEQ.

That portion of Block C in Rouse's Second Addition to the City of Bozeman, Gallatin County, Montana, and described as follows:

Commencing at the northwest corner of Block B of Rouse's Second Addition; thence, South eighteen minutes, thirty-five seconds (18' 35") West, three hundred eleven and four-hundredths (311.04) feet along the east line of Wallace Avenue to the True Point of Beginning: thence South eighty nine degrees, forty-one minutes, twenty-five seconds (89°41'25") East, eighty six and fifty-five-hundredths (86.55) feet; thence South eighteen minutes, thirty-five seconds (0°18'35") West, one hundred forty-five (145) feet; thence North 89 degrees, forty-one minutes, twenty-five seconds (89°41'25") West, eighty six and fifty-five hundredths (86.55) feet to a point on the westerly line of said Block C; thence North eighteen minutes, thirty-

five seconds (0°18'35") East one hundred forty five (145) feet along said westerly line to the True Point of Beginning.

Harrington's Inc. 212 S. Wallace Ave. Bozeman, Montana 59715

President, Harrington's Inc.

9/26/08

Date





544 East Main St.

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requires the written consent of current property owners to be included as part of a voluntary cleanup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Quality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional cleanup is needed, a Supplemental Investigation of asbestos-containing ore in and along your property must be completed.

Section 75-10-733(2)(c), MCA requires that voluntary cleanup plans must include, "The written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

As a property owner of 544 East Main St. as described below, I, <u>CLAPK L. FINCH</u> provide consent for the implementation of this voluntary cleanup plan proposed for the facility as approved by DEQ. I further grant access to the facility to Tetra Tech, its agents, and DEQ.

Rouses 1st Boz SEC 7 2S 6E Lots 9 thru 14 Block B

East Main Marketplace LLC
544 E. Main St.

Bozeman, MT 59715-3766

CLARK L FINCH OWNER

Name/Title (please print)

9/10/2008

Date





519 East Babcock

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requires the written consent of current property owners to be included as part of a voluntary cleanup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Quality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional cleanup is needed, a Supplemental Investigation of asbestos-containing ore in and along your property must be completed.

Section 75-10-733(2)(c), MCA requires that voluntary cleanup plans must include, "The written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

As a property owner of 519 East Babcock as described below, I, remain Library provide consent for the implementation of this voluntary cleanup plan proposed for the facility as approved by DEQ. I further grant access to the facility to Tetra Tech, its agents, and DEQ.

Rouses 1st Boz Sec 7 2S 6E Lot 23 and 24 Block B

IES Properties LLC	
516 East Babcock St.	
Bozeman MT, 59715	
Marie Polit	
Signature(s)	
Terrance E. Kubat / Parton	1
Name/Title (please print)	
9-9-200	
Date	





502 East Main St.

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requires the written consent of current property owners to be included as part of a voluntary cleanup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Quality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional cleanup is needed, a Supplemental Investigation of asbestos-containing ore in and along your property must be completed.

Section 75-10-733(2)(c), MCA requires that voluntary cleanup plans must include, "The written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

As a property owner of 502 East Main St. as described below, I, TUST PLAIN LOCAL, LLC provide consent for the implementation of this voluntary cleanup plan proposed for the facility as approved by DEQ. I further grant access to the facility to Tetra Tech, its agents, and DEQ.

Rouses 1st Boz Sec 7 2S 6E Lots 1 and 2 Block B

Just Plain Local LLC	
623 N. Black	
Bozeman, MT 59715	1 8
Riggy X. Hump.	hray Middel J. Brens
Signature(s)	B A Result An
THE MBE MEMBERS	A. L. Dringer / plin
Name/Title (please print)	
9-12-08	
Date	





S23 East Babcock

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requires the written consent of current property owners to be included as part of a voluntary cleanup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Quality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional cleanup is needed, a Supplemental Investigation of asbestos-containing ore in and along your property must be completed.

Section 75-10-733(2)(c), MCA requires that voluntary cleanup plans must include, "The written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

As a property owner of 533 East Babcock as described below, I, ______, provide consent for the implementation of this voluntary cleanup plan proposed for the facility as approved by DEQ. I further grant access to the facility to Tetra Tech, its agents, and DEQ.

Rouses 1st Boz SEC 7 2S 6E Lots 19 thru 20 Block B

Earl and Janice Peace
1201 Highland Blvd. Apt. A310
Bozeman, MT 59715
Janue Reacen
Signature(s) Earl J. Reace
MANAGING PARTNER OF EARL PEKE REALTY COLLP
Name/Title (please print)
9/16/08
Date





533 East Babcock

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requires the written consent of current property owners to be included as part of a voluntary cleanup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Quality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional cleanup is needed, a Supplemental Investigation of asbestos-containing ore in and along your property must be completed.

Section 75-10-733(2)(c), MCA requires that voluntary cleanup plans must include, "The written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

As a property owner of 533 East Babcock as described below, I, ______, provide consent for the implementation of this voluntary cleanup plan proposed for the facility as approved by DEQ. I further grant access to the facility to Tetra Tech, its agents, and DEQ.

Rouses 1st Boz SEC 7 2S 6E Lots 19 thru 20 Block B

Earl and Janice Peace 1201 Highland Blvd. Apt. A310 Bozeman, MT 59715

Signature(s) Larly Reace

MANAGING PARTNER OF EARL PEACE REALTY, LLP

Name/Title (please print)

9/16/08

Date

STORY DISTRIBUTING PROPERTY

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requests the written consent of current property owners to be included as part of a voluntary cleanup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Quality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional cleanup is needed, a Supplemental Investigation of asbestos-containing ore in and along your property must be completed.

Along the exterior of your property we request access to collect test pit samples along the northern portions of your property.

Section 75-10-733(2)(c), MCA, requires that voluntary cleanup plans must include, "The written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

As a property owner of STORY DISTRIBUTING PROPERTY as described below, I, being the <u>President</u> of Story Distributing Company, a Montana corporation provide consent for the implementation of this voluntary cleanup plan proposed for the facility as approved by DEQ. I further grant access to the facility to Tetra Tech, its agents, and DEQ.

A tract of land being portions of Lots 24, 25, and 26 of Block C and of Lot 1 of Block F, and of vacated Curtiss Street of Rouse's 2nd Addition located in the southeast One-Quarter of Section 7, Township 2 South, Range 6 East, P.M.M., City of Bozeman, Gallatin County, Montana and being further described as follows:

Beginning at the southwest corner pf a tract shown on Certificate of Survey No. 460. Thence South 89-39-10 East along the South line of said tract, a distance of 86.55 feet. Thence South 00-18-51 West a distance of 186.51 feet. Thence North 89-38-56 West a distance of 86.55 feet. To a point on the west line of said Block F. Thence North 00-21-04 East along said west line, a distance of 15.71 feet to the northwest corner of said Block F. Thence North 00-14-36 East a distance of 60.00 feet to the southwest corner of said Block C. Thence North 00-20050 East along the west line of said Block C, a distance of 110.80 feet to the Point of Beginning. Being Tract A of the Amended Subdivision plat of a portion of Blocks C and F of Rouse's 2nd Addition C of Plats 6B. Said tract of lang being 0.371 acres along with and subject to existing easements.

Story Distributing Company P.O. Box 1201 Bozeman, Montana 59771-1201

Signature)

Name/Title (please print)

Date: 14/05 28, 2008





512 East Main St.

Sections 75-10-730 through 738, Montana Code Annotated (MCA) requires the written consent of current property owners to be included as part of a voluntary cleanup plan. As part of the process for the cleanup efforts, the Montana Department of Environmental Quality (DEQ) has identified additional areas to be included in part with the voluntary cleanup plan efforts. To effectively determine if additional cleanup is needed, a Supplemental Investigation of asbestos-containing ore in and along your property must be completed.

Section 75-10-733(2)(c), MCA requires that voluntary cleanup plans must include, "The written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its agents and the department." The following agreement has been developed to satisfy this requirement.

As a property owner of 512 East Main St. as described below, I, The Title buy's provide consent for the implementation of this voluntary cleanup plan proposed for the facility as approved by DEQ. I further grant access to the facility to Tetra Tech, its agents, and DEQ.

Rouses Add -Boz-Amnd SEC 7 2S 6E Lots 3 thru 8 Block B

The Tire Guys
PO Box 23509
Billings, MT 59104

Signature(s)

TRENT FUHLMAN (FO

Name/Title (please print)

9-12-2008

APPENDIX D CONTINGENCY PLAN

Contingency Plan for the 2008 Addendum to the CMC East Main Facility Site Voluntary Cleanup

Bozeman, MT

June 24, 2003 Revision1 Amended November 2008

Prepared By: Resource Technologies, Inc.

Appended by Tetra Tech

1.0 Introduction

The City of Bozeman is amending this report for areas outside the *Voluntary Cleanup Plan for a site adjacent to CMC East Main Facility, Bozeman, Montana, Revision 2, October 2002* (hereinafter referred to as the 2002 VCP) as identified in the 2008 VCP Addendum for the undertaking of the remediation of the former CMC East Main Facility Facility. Site contamination in the 2008 Addendum is attributed to asbestos ore handling and storage. The Montana Department of Environmental Quality (DEQ) regulates the Facility under the Comprehensive Environmental Cleanup and Redevelopment Act (CECRA). The cleanup will be performed under the approved 2002 VCP and 2008 VCP Addendum. Because of the presence of asbestos ore the site became listed as a CECRA Facility.

This portion of the Facility is west of and adjacent to the previously addressed portions of the Facility which were addressed as part of the 2002 VCP. This portion of the Facility is shown on **Figure 1**. The site consists of Wallace Avenue and properties and either site including the alley between Wallace and Church. The CMC East Main Facility portion of the Facility consists of 5 acres fronting Main Street between Wallace Avenue and Lindley Park. The CMC East Main Facility portion of the Facility is shown on **Figure 1 of the 2002 VCP Contingency Plan by RTI**.

The VCP and addendum calls for excavation and offsite disposal of the asbestos contaminated soil. The asbestos contaminated soil will be hauled from the site to the City of Bozeman landfill located on Story Mill Road as shown on **Figure 2** and presents the transportation route. An Asbestos Transport and Disposal Permit will be obtained from the DEQ Asbestos Control Program to facilitate transport and disposal of the asbestos contaminated soil.

This Emergency Contingency Plan describes the actions Facility personnel will take to respond to fires, explosions, or any unplanned sudden or non-sudden release of special waste or special waste constituents to air, soil, or surface water. It is also intended to inform emergency responders of the unique site hazards and procedures used to mitigate the hazards.

1.1 Environmental Hazards

Historical activities at the Facility have resulted in extensive soil contamination. The primary contaminants of concern are asbestos. Asbestos and lead, in addition to other contaminants at the 2002 VCP site included arsenic, cadmium, mercury, petroleum hydrocarbons, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and dioxin and dioxin-like compounds. These contaminants were cleaned up as part of the 2002 VCP remedial activity. Information sheets for the primary contaminants of concern from the Agency for Toxic Substances and Disease Registry (ARSDR) are attached.

Asbestos

In the 1950's a property at the Facility in the 200 block of South Wallace Avenue was used for storage and milling of asbestos. The asbestos has been identified as anthophyllite. It is reported that asbestos ore was trucked to the South Wallace site from mines located in the Gallatin Canyon. Based on interviews, unprocessed ore or ore tailings were stored in piles north and east of the buildings. Ore and tailing piles were spread across the Facility and covered with gravel after the milling operations ceased. The asbestos ore was also used as fill material at aeveral locations on the Facility, including the corner of Wallace Avenue and Main Street, and in the Alley south of Heeb's Grocery. Asbestos exposure is primarily through inhalation and can lead to asbestosis, lung cancer, and mesothelioma (a rare form of cancer in the membrane surrounding the lung and organs).

Metals in Soils

Lead was recovered from batteries at several locations on the 2002 VCP site which were subsequently remediated.

Organic compounds in Soils

Organic compounds including petroleum hydrocarbons, polynuclear aromatic hydrocarbons PAHs, PCBs, and dixoins and dioxin like compounds were detected on the 2002 VCP site and were subsequently remediated.

2.0 **Coordination with Emergency Service Providers**

The following agencies provide emergency services to the site, the landfill, and the transportation routes:

- Bozeman Police Department;
- Montana State Highway Patrol;
- Gallatin County Sheriffs Department;
- City of Bozeman City Fire Department and HAZMAT Team;
- Bozeman Deaconess Hospital:
- American Medical Response (AMR) ambulance service; and,
- City/County Emergency Planning Committee; and Disaster & Emergency Services.

One purpose of this plan is to coordinate with these agencies to make them aware of the unique site hazards and coordinate emergency response. A copy of the amendment to the contingency plan and all revisions to the plan will be given to the local and state emergency response organizations mentioned above.

It is requested that the agencies listed above agree not to enter the contaminant reduction zones and exclusion zones of the subject site unless the Emergency Coordinator agrees that entry is necessary. In the event the agency representatives cannot contact the Emergency Coordinator, they may enter the site.

The agencies agree to minimize dispersal of contaminants by proceeding through personal and vehicle decontamination before exiting the site through the contaminant reduction zone. In the event of a life-threatening emergency, the Owner and Operator agree to allow site ingress and egress without complete decontamination.

In the event that access of the exclusion zone is necessary, it is recommended that emergency personnel don personal protective equipment (PPE). Recommended PPE includes disposable protective coveralls (Tyvek or equivalent), overboots, gloves, eye protection, and respiratory protection.

2.1 **Agency Contacts**

In the event of an emergency requiring agency emergency response, it will be requested through Emergency medical Services (EMS) by calling 911.

The following agencies are non-emergency points of contact for emergency providers:

The Bozeman Police Department 406-582-2000 615 South 16th Bozeman, MT 59715

Attn: Bill Kayser

The Gallatin County Sheriffs Department

406-582-2125

615 South 16th

Bozeman, MT 59715

Attn: Sheriff Cashell

The City of Bozeman Fire Department and HAZMAT Team

406-582-2350

34 N. Rouse

Bozeman, MT 59715

Attn: Chuck Winn-Operations Chief

Bozeman Deaconess Hospital

406-585-5000

915 Highland Blvd.

Bozeman, MT 59715

Attn: Susan Kerschen

American Medical Response (AMR) Ambulance Service

406-586-0037

1201 Industrial

Bozeman, MT 59715

Attn: Steve

City/County Emergency Planning Committee and Disaster & Emergency Services

406-582-2350; 406-582-2100

34 N. Rouse

Bozeman, MT 59715

Attn: Jason Shrauger

Montana State Highway Patrol – Bozeman Headquarters

406-388-3190

91 East Central Ave, Suite A

Belgrade, MT 59714

Attn: Captain Gary Becker

A copy of this amendment to the contingency plan, the contingency plan, and all revisions to the plan are to be maintained at the Facility and given to the local and state emergency response organizations mentioned above.

The contingency plan is required to be reviewed and immediately amended, if necessary, whenever:

- Applicable regulations are revised;
- The plan fails in an emergency;
- The treatment Facility changes;
- The list of emergency coordinators change; and,
- The list of emergency equipment changes.

2.2 Facility Related Points of Contact

The City of Bozeman is the owner of the Facility and the landfill. Tetra Tech MM is the Engineer on the amended remediation project. The remedial contractor will be identified by and contracted through the City. The Emergency coordinators can be contact for this information.

At all times, there will be at least one employee either on the Facility premises or on call (i.e. available to respond to an emergency by reaching Facility within a short period of time) with the responsibility for coordinating all emergency response measures. This Emergency Coordinator is thoroughly familiar with all aspects of the Facility's contingency plan, all operations and activities at the Facility, the location and characteristics of waste handled, the location of all records within the Facility, and the Facility layout. The following is a list of Emergency coordinators.

Emergency Coordinators:

Name	Affiliation	Address	Phone #s
Kirk Miller	Tetra Tech MM	303 Irene St.	406-443-5210 (work)
		Helena, MT 59601	406-461-0234 (cell)
			406-449-7563 (home)
Matt Culpo	Tetra Tech MM	303 Irene St.	406-443-5210 (work)
		Helena, MT 59601	406-422-6147 (cell)

3.0 Site Access Control and Security

The site is an active area of town with operating business and a primary transportation route through town. As a result, the site will be remediated in stages with only select areas (work zones) being closed at any one time. Closure of the work zones will be determined by the contractor and approved by the City. This is necessary to maintain operation of the businesses and traffic patterns by minimizing disruption. Access to the work zone is restricted to authorized personnel working for the City of Bozeman, Tetra Tech MM and subcontractors and emergency response personnel. The work zones will all contain the similar elements for protection of public and project personnel.

The work zones will be fenced with temporary (moveable) 6-foot high chain-link fence. The fence will be temporarily secured in-place around each work zone. The fence will be affixed with warning signs prohibiting entry by non-authorized persons posted. Access to the site will be limited to the gates. An example work zone is shown on shown in **Figure 3**. The asbestos waste disposal area within the landfill will be fenced and access will be limited to the gates shown in **Figure 4**.

A security service will provide patrols of the site between the hours of 9 p.m. and 3 a.m. and during daylight hours on non-working days. The security patroller will walk the site perimeter along the outside of the fence using a flashlight or other means to illuminate the site. If the patroller observes or suspects trespasser(s) he/she will immediately notify the City of Bozeman Police Department and also contact the Emergency Coordinator.

4.0 Emergency Equipment

Per 40 CFR 265.32 the following emergency equipment is required:

- a. An internal communication or alarm system capable of providing immediate emergency instruction to Facility personnel;
- b. A device such as a telephone or hand-held two-way radio capable of summoning emergency assistance;
- c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment;
- d. Water at adequate volume and pressure to supply water hose stream, or foam producing equipment, of automatic sprinklers, of water spray systems.
- e. Heaters and generators will be maintained on site to thaw frozen hoses and nozzles.

5.0 Emergency Procedures

5.1 Evacuation Plan

All site personnel shall receive site-specific training on emergency site communications and evacuation procedures as specified in the site-specific health and safety plan. Emergency communications will include the use of cellular telephones, two-way radios, horn blasts, and hand signals. Task specific procedures 0shall be implemented if necessary to ensure appropriate communication and evacuation procedures are provided in area's where noise from operating machinery and limited visibility which may interfere with communications cannot be avoided. **Figures 3** and **4** show the evacuation routes that Facility and landfill workers are to utilize in the event of an emergency requiring site evacuation. Alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires) are also shown.

If the call to evacuate is make, workers within the work area are to immediately proceed to the contaminant reduction zone in an orderly manner and pass through the decontamination facilities. Workers shall follow the decontamination procedures as they pass through the decontamination Facility including removing personal protective equipment and showering prior to entering the clean room. In the event that power is lost or showing is not feasible, workers shall remove all PPE in the equipment room and proceed through the shower room to the clean room.

5.2 General Emergency Procedures

The Emergency Coordinator is responsible for the overall conduct of emergency procedures. This includes maintaining an orderly succession of supervision; making necessary reports to all concerned parties; ensuring that the causes of accidents are identified and corrected; and insuring that injured personnel 9with or without life threatening injuries) are escorted to medical treatment by the site safety officer or other supervisory personnel.

In the case of an on-site emergency, personnel shall immediately notify the EMS, if required, and the Emergency Coordinator.

Whenever there is an imminent or actual emergency situation, the Emergency Coordinator (or his designee when the emergency coordinator is on call) will immediately:

- Notify EMS if the accident has resulted in or could result in an imminent risk to public health and safety or is an otherwise reportable incident (i.e. a vehicular accident);
- Activate internal alarms or communication systems, where applicable, to notify all workers;
- Notify the Project Manager and Site Health and Safety Officer;
- The Emergency Coordinator will notify the appropriate DEQ representative within 24 hours a reportable release of a regulated substance, if applicable;
- Notify appropriate City/County and State agencies with designated response roles if their help is needed;

- The emergency coordinator will ensure that, in the affected area(s) of the facility:
 - No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
 - O All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
- The owner or operator must notify the EPA Regional Administrator, and appropriate State and local authorities, that the Depot is secure before operations are resumed in the affected area(s) of the Depot.
- The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the EPA Regional Administrator. The report will include:
 - o Name, address, and telephone number of the owner or operator.
 - o Name, address, and telephone number of the facility.
 - O Date, time, and type of incident (e.g., fire, explosion).
 - Name and quantity of material(s) involved;
 - o The extent of injuries (if any).
 - An assessment of actual or potential hazards to human health or the environment, where this is applicable.
 - Estimated quantity and disposition of recovered material that resulted from the incident.

5.3 Specific Emergency Procedures

5.3.1 Spill or Leak of Wastes Onto Ground Outside of Exclusion Zone or Contaminant Reduction Zone

In the case of waste being released on the ground outside of the exclusion zone, contaminant reduction zone, or support zone, the personnel involved with or noting the release shall take the following actions:

- Notify EMS if the accident has resulted in or could result in an imminent risk to public health and safety or is an otherwise reportable incident (i.e. a vehicular accident);
- Immediately notify the Emergency Coordinator;
- Keep unauthorized persons away from the release;
- Keep all persons upwind;
- Adequately wet the waste if water is available;
- Isolate the release area immediately for 30 to 80 feet in all directions using warning tape or other appropriate materials;
- Cover the waste with a weighted tarp until cleanup equipment is available;
- Once the release is stabilized, document the release time, size, location and other relevant factors.

In addition to the items listed in Section 4.2, the Emergency Coordinator shall:

- Coordinate clean up the released material using appropriate equipment and PPE maintaining the waste adequately wet during handling;
- Coordinate transfer or released waste to an appropriate container depending on the volume released;
 - o Polyethylene bags for small releases;
 - o Drums for moderate sized releases; and
 - O Dump trucks or containers lined in accordance with the approved waste handling plan in the VCP.

5.3.2 Spill or Leak of Wastes Into Surface Water

In the case of waste being released to surface water, the personnel involved with or noting the release shall take the following actions:

- Notify EMS if the accident has resulted in or could result in an imminent risk to public health and safety or is an otherwise reportable incident (i.e. a vehicular accident);
- Immediately notify the Emergency Coordinator;
- Keep unauthorized persons away from the release;
- Keep all persons upwind;
- Isolate the release area immediately for 30 to 80 foot in all directions using warning tape or other appropriate materials;
- Place silt fencing or other appropriate containment around waste in water to contain it;
- Notify downstream persons of the release;
- Adequately wet any waste not in the water;
- Cover the waste with a weighted tarp until cleanup equipment is available;
- Once the release is stabilized, document the release time, size, location and other relevant factors.

In addition to the items listed in Section 4.2, the Emergency Coordinator shall:

- Coordinate clean up the released material using appropriate equipment and PPE maintaining the waste adequately wet during handling;
- Coordinate transfer or released waste to an appropriate container depending on the volume released;
 - Polyethylene bags for small releases;
 - o Drums for moderate sized releases; and
 - Dump trucks or containers lined in accordance with the approved waste handling plan in the VCP.

5.3.3 Airborne Release of Wastes

In the case of a visible or suspected release of air-borne waste, the personnel involved with or noting the release shall take the following actions:

• Cease all activities that resulted in or may have contribute to release;

- Notify EMS if the accident has resulted in or could result in an imminent risk to public health and safety or is an otherwise reportable incident;
- Immediately notify the Emergency Coordinator;
- o Immediately evacuate all persons within 100 feet downwind of the release;

In addition to the items listed in Section 4.2, the Emergency Coordinator shall:

- Notify appropriate City/County and State agencies with designated response roles if their help is needed;
- The Project Manager will notify the appropriate DEQ representative within 24 hours of the release;
- Take appropriate actions to contain the released waste and/or monitor the surrounding area;
- Coordinate decontamination of persons possibly impacted by the release
- Once the release is stabilized, document the release time, size, location and other relevant factors;
- Depending on the circumstances of the release, the Emergency Coordinator shall either:
 - o Commence air monitoring in the area expected to be impacted by the release; and/or
 - o Collect wipe or bulk samples from surfaces possibly impacted by the release.

5.3.4 Fire or Explosions

In the case of a fire or explosion the following actions shall be taken:

- Cease all activities that resulted in or may have contribute to release;
- Immediately notify EMS if fire could spread or the incident has resulted in or could result in an imminent risk to public health and safety or is an otherwise reportable incident;
- Immediately notify the Emergency Coordinator;
- Site personnel shall only attempt to control minor fires using fire extinguishers and/or water.

5.4 Decontamination for Emergencies

The decontamination standard operating procedure is attached. If possible, all persons leaving the contaminant reduction zone and exclusion zone should decontaminate. The decontamination procedure can be modified in emergency situations based on the nature of the emergency. If power is lost and showering out is not possible, persons leaving the facility shall dry decontaminate by removing all PPE and any visible waste from themselves or others being transported out of the area. At a minimum, personal protective equipment (coveralls, Tyvek suits, respirators, overboots, and gloves) should be removed in the decontamination facilities prior to leaving the facility. Extra tyvek and water/detergent will be available for quick containment/decontamination prior to ambulance transport.

5.5 Emergency Medical Treatment Procedures

Other than CPR and immediate first aid, medical treatment will be provided by Emergency Medical Technicians, paramedics, or persons with appropriate medical training. Personnel trained in standard first aid and CPR will be present at the site. Standard first aid procedures will only be used for the following injuries and incidents:

- First Aid for contaminant contact, ingestion and inhalation
- First Aid for cuts, abrasions, punctures
- First Aid for impacts and skeletal injuries
- First Aid for cardiovascular/pulmonary emergencies.

STANDARD OPERATING PROCEDURE

EXCLUSION ZONE ENTRY/EXIT SEQUENCE AND PERSONNEL DECONTAMINATION

GENERAL

The Personnel Decontamination Unit is the only means of ingress and egress for the work area for persons not traveling in vehicles. All materials exit the work area through the Equipment Decontamination Unit.

- All persons walking, without exception must pass through decontamination unit for entry
 into and exiting from the work area for any purpose. Parallel routes for entry or exit of foot
 traffic are not allowed. Do not remove equipment or materials through Personnel
 Decontamination Unit.
- Remove all street clothes in clean room, dress in clean disposable coveralls, and don respiratory protection equipment. Do not allow contaminated items to enter this room. Enter this room either from outside the structure dressed in street clothes, or naked from the showers.
- Work equipment, footwear and additional contaminated work clothing are to be left in equipment room (contaminated area). This is a change and transit area for workers.

EXCLUSION ZONE ENTRY SEQUENCE

- 1. Enter Changing Room, remove street clothing, put on clean disposable coveralls and respirator (if required) and pass through the Shower Room into the Equipment Room.
- 2. Any additional clothing and equipment left in Equipment Room are put on in the Equipment Room.
- 3. Proceed to Work Area.

EXCLUSION ZONE EXIT/DECONTAMINATION SEQUENCE

Adhere to the following personal decontamination procedures whenever leaving the work area.

- 1. Remove all gross contamination and debris from overalls and feet before leaving the work area.
- 2. Proceed to the Equipment Room and remove all clothing except respiratory protection equipment. Extra work clothing may be stored in contaminated end of the Equipment Room. Disposable coveralls are placed in a bag for disposal with other material.
- 3. Still wearing respirator (if applicable), proceed to shower. Showering is mandatory. Care must be taken to follow reasonable procedures in removing the respirator to avoid asbestos fibers while showering. The following procedure is required as a minimum:

A. Type C Supplied Air or Powered Air-Purifying Respirators

The following decontamination procedure as a minimum requirement whenever leaving the work area:

a. Thoroughly wet body including hair and face. If using a Powered Air-Purifying Respirator (PAPR) hold blower unit above head to keep canisters dry.

- b. With respirator still in place thoroughly wash body, hair, respirator face piece, and all parts of the respirator except the blower unit and battery pack on a PAPR. Pay particular attention to seal between face and respirator and under straps.
- c. Take a deep breath, hold it and/or exhale slowly, completely wet hair, face, and respirator. While still holding breath, remove respirator and hold it away from face before starting to breath.
- d. Carefully wash facepiece of respirator inside and out.
- e. If using PAPR: shut down in the following sequence:
 - i. First cap inlets to filter cartridges, then turn off blower unit (this sequence will help keep debris which has collected on the inlet side of filter from dislodging and contaminating the outside of the unit).
 - ii. Thoroughly wash blower unit and hoses.
 - iii. Carefully wash battery pack with wet rag. Be extremely cautious of getting water in battery pack as this will short out and destroy battery.
- f. Shower completely with soap and water.
- g. Rinse thoroughly.
- h. Rinse shower room walls and floor prior to exit.
- i. Proceed from shower to Changing Room and change into street clothes or into new disposable work items.

B. Air Purifying-Negative Pressure Respirators

Use the following decontamination procedure as a minimum requirement whenever leaving the work area with a half or full face cartridge type respirator:

- a. Thoroughly wet body from neck down.
- b. Wet hair as thoroughly as possible without wetting the respirator filter if using an air purifying type respirator.
- c. Take a deep breath, hold it and/or exhale slowly, complete wetting of hair, thoroughly wetting face, respirator and filter (air purifying respirator). While still holding breath, remove respirator and hold it away from face before starting to breath.
- d. Dispose of wet filters from air purifying respirator.
- e. Carefully wash facepiece of respirator inside and out.
- f. Shower completely with soap and water.
- g. Rinse thoroughly.
- h. Rinse shower room walls and floor prior to exit.
- i. Proceed from shower to Changing Room and change into street clothes or into new disposable work items.
- 4. After showering, move to the Changing Room and dress in either new coveralls for another entry or street clothes if leaving.



ASBESTOS CAS # 1332-21-4

Agency for Toxic Substances and Disease Registry ToxFAQs

September 1996

This fact sheet answers the most frequently asked health questions (FAQs) about asbestos. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

SUMMARY: Exposure to asbestos usually occurs by breathing contaminated air in workplaces that make or use asbestos. Asbestos is also found in the air of buildings containing asbestos that are being torn down or renovated. Asbestos exposure can cause cancer and other serious lung problems. This substance has been found in at least 58 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is asbestos? (Pronounced ăs-běs/təs)

Asbestos is the name that's used for a group of six different fibrous minerals (amosite, chrysotile, crocidolite, and the fibrous varieties of tremolite, actinolite, and anthophyllite) that occur naturally in soil and rocks in some areas. Asbestos fibers vary in length and may be straight or curled.

Asbestos fibers are resistant to heat and most chemicals. Because of this, asbestos fibers are used for a wide range of manufactured goods, mostly roofing shingles, ceiling and floor tiles, paper products, asbestos cement products, friction products (automobile clutch, brake, and transmission parts), textiles, packaging, gaskets, and coatings.

What happens to asbestos when it enters the environment?

- Asbestos can enter the air and water from the weathering of natural deposits and the wearing down of manufactured asbestos products, such as brake pads.
- Small fibers may remain suspended in the air for a long time before settling. Larger fibers tend to settle more quickly.

- Asbestos fibers aren't able to move through soil and they aren't broken down to other compounds in the environment. Therefore, they can remain in the environment for decades or longer.
- Asbestos fibers may build up in animals.

How might I be exposed to asbestos?

- D Breathing low levels in air.
- Breathing higher levels in air while working in industries that make or use asbestos products or near a building that contains asbestos products and is being torn down or renovated.
- Breathing higher levels in air near an asbestos-related industry or near an asbestos-containing waste site.
- Drinking water containing asbestos from natural sources or from asbestos-containing cement pipes in drinking water distribution systems.

How can asbestos affect my health?

Asbestos mainly affects the lungs. Changes in the membrane surrounding the lung are quite common in workers exposed to asbestos. These are also sometimes found in people living in areas with high levels of asbestos in the air, but effects on breathing usually aren't serious.

ToxFAQs Internet address via WWW is http://www.atsdr.ede.gov/toxfaq.html

Breathing very high levels of asbestos may result in a slow buildup of scar-like tissue in the lungs and in the membrane that surrounds the lungs. This disease is called asbestosis, and is usually found in asbestos workers and not in the general public. People with asbestosis have shortness of breath, often along with a cough and sometimes heart enlargement. This is a serious disease and can eventually lead to disability or death.

How likely is asbestos to cause cancer?

The Department of Health and Human Services (DHHS) has determined that asbestos is a known carcinogen.

It is known that asbestos causes cancer in people. There are two types of cancer caused by exposure to high levels of asbestos: cancer of the lung tissue itself and mesothelioma, a cancer of the membrane that surrounds the lung and other internal organs. Both of these are usually fatal. These diseases don't develop immediately, but show up only after many years.

Interactions between cigarette smoke and asbestos increase your chances of getting lung cancer. Studies of workers suggest that breathing asbestos can increase the chances of getting cancer in other parts of the body (stomach, intestines, esophagus, pancreas, kidneys), but this is not certain.

People who are exposed to lower levels of asbestos may also have an increased risk of developing cancer, but the risks are usually small and are difficult to measure.

It is not known whether ingesting asbestos causes cancer. Some people who had been exposed to asbestos fibers in their drinking water had higher-than-average death rates from cancer of the esophagus, stomach, and intestines. However, it isn't known whether this was caused by asbestos or by something else.

Is there a medical test to show whether I've been exposed to asbestos?

Chest X-rays cannot detect asbestos fibers, but can detect early signs of lung disease caused by asbestos. Other tests (lung and CAT scans), are also useful in detecting changes in the lungs.

Tests exist to measure asbestos fibers in urine, feces, mucus, or material rinsed out of the lung. However, low levels of asbestos fibers are found in these body fluids in nearly all people, so higher-than-average levels can only show that you have been exposed to asbestos, not whether you will experience any health effects.

Has the federal government made recommendations to protect human health?

In 1989, the EPA banned all new uses of asbestos; uses established before this date are still allowed. The EPA has established regulations that require school systems to inspect for damaged asbestos and to eliminate or reduce the exposure by removing the asbestos or by covering it up. The EPA has set a limit of 7 million fibers per liter (MFL) as the concentration of long asbestos fibers that may be present in drinking water.

Glossary

Carcinogen: A substance that can cause cancer.

CAS: Chemical Abstracts Service.

CAT scan: A medical test in which a computer makes a 3-dimensional image of a body organ.

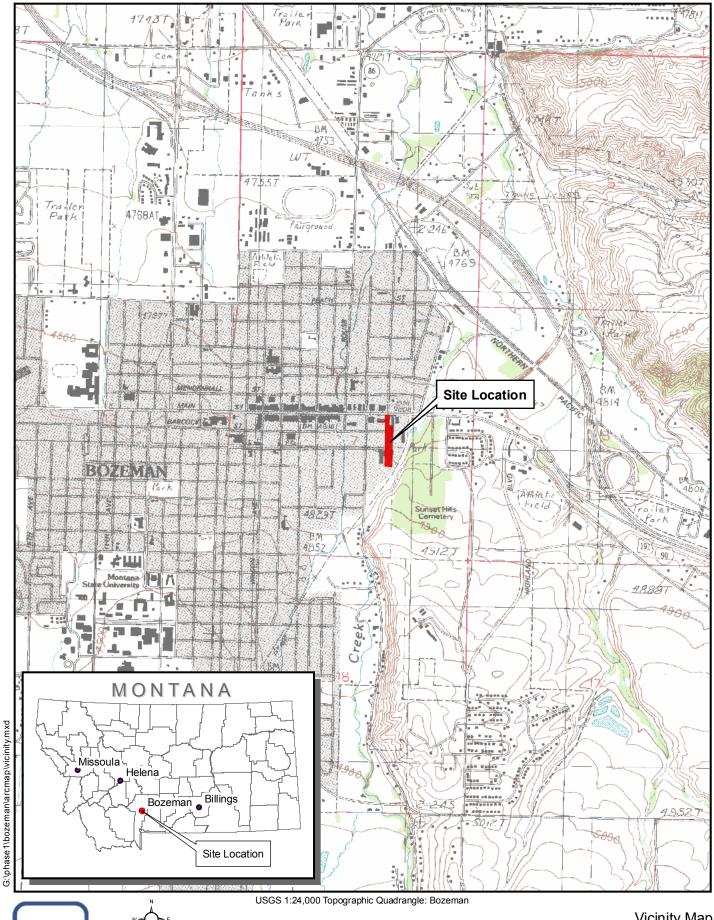
MFL: Million fibers per liter.

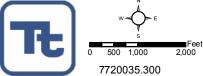
References

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological profile for asbestos. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop E-29, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 404-639-6359. ToxFAQs internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

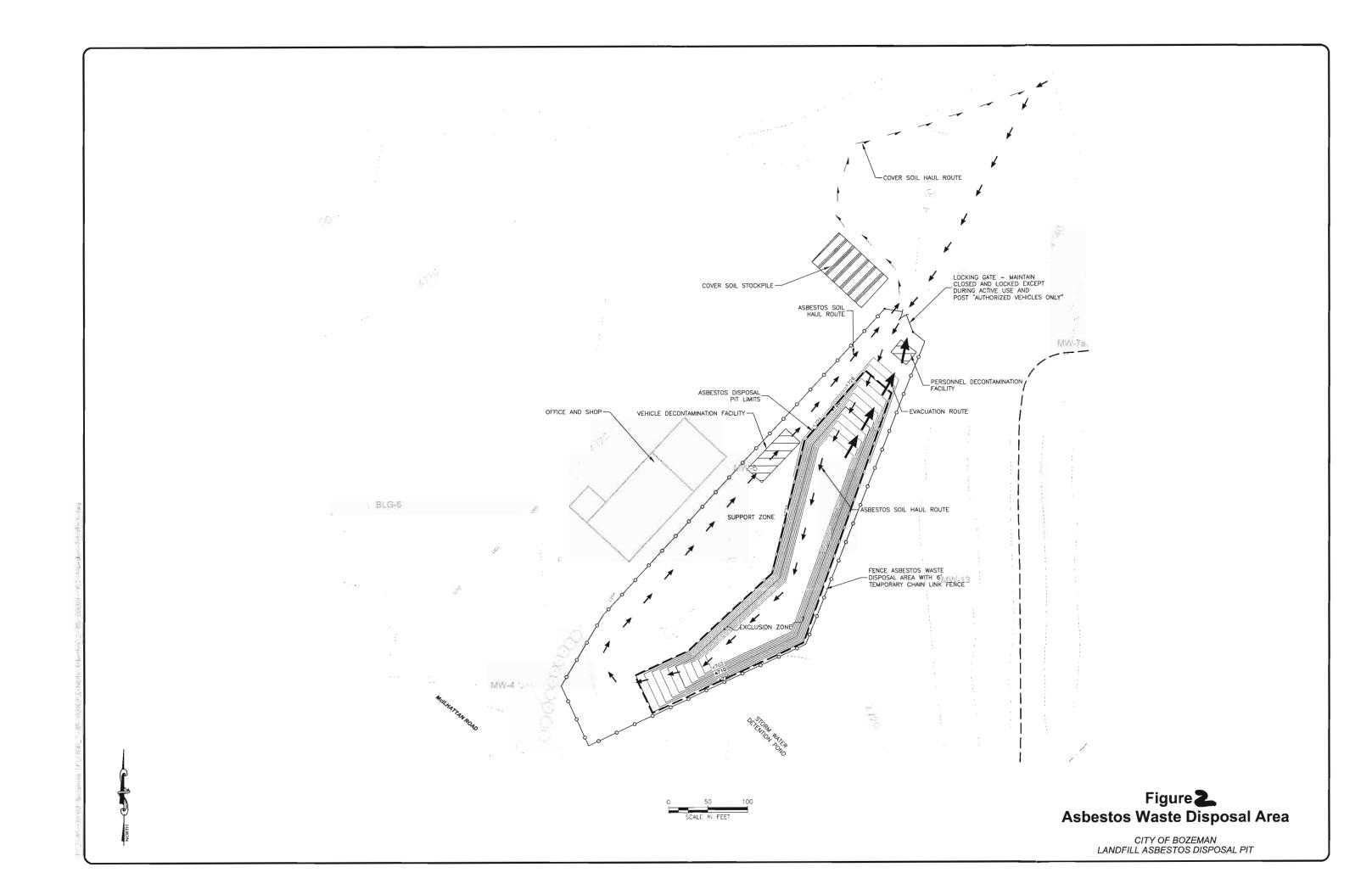


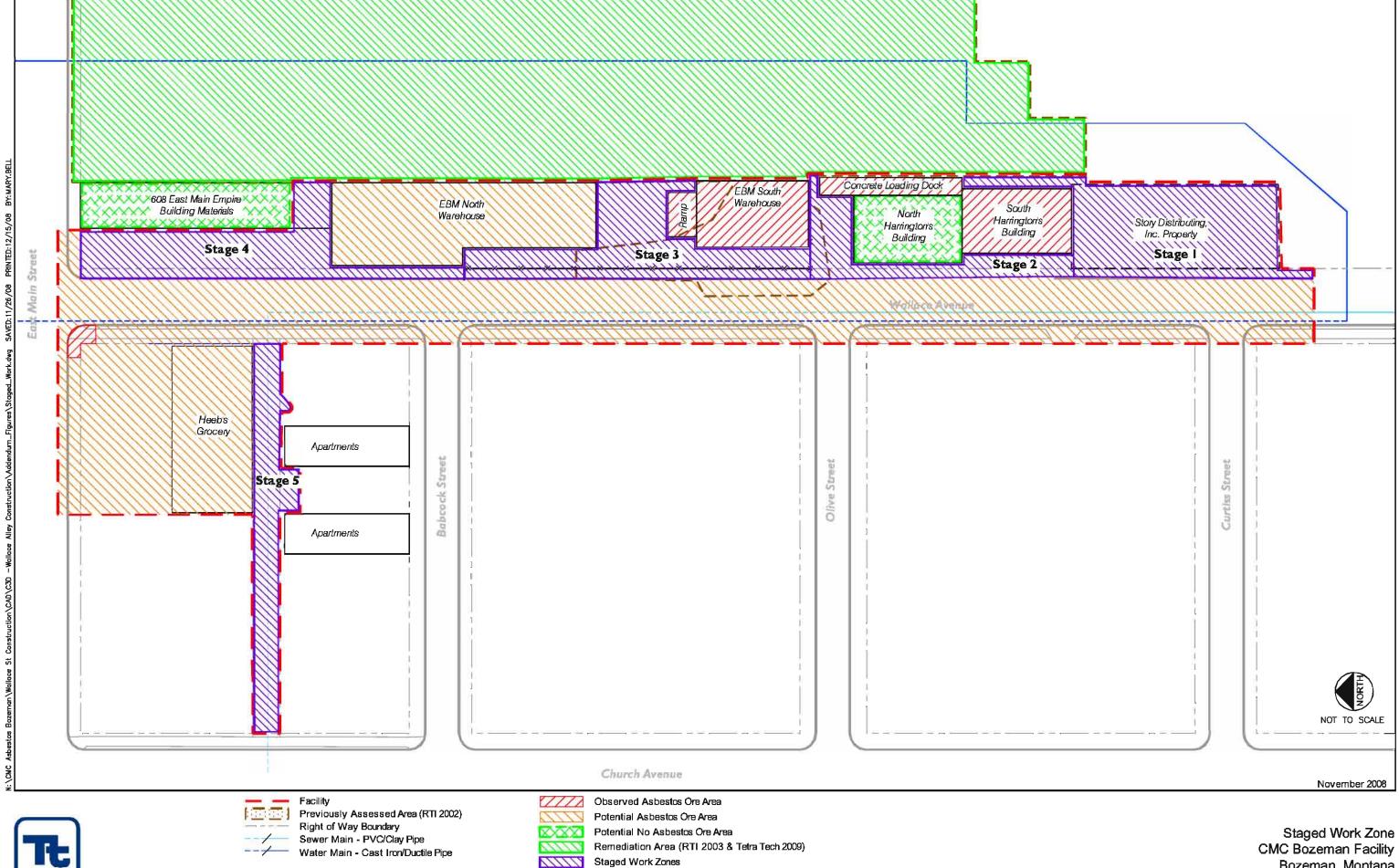




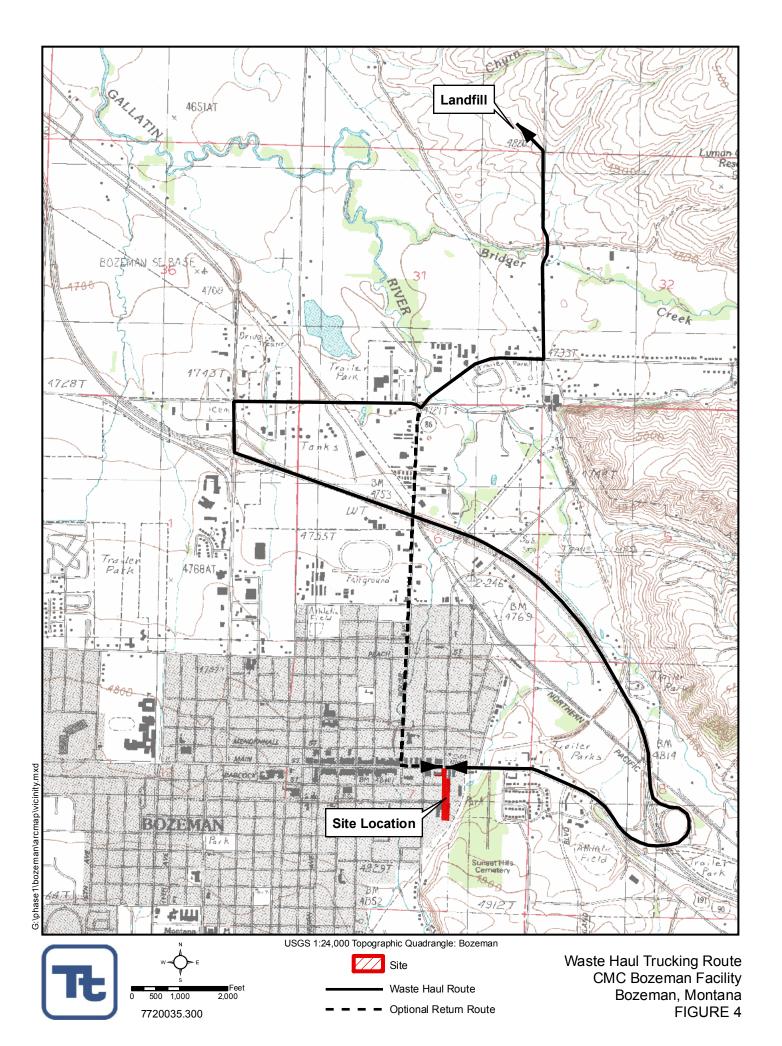


Vicinity Map CMC Bozeman Facility Bozeman, Montana FIGURE 1





7720035.300



APPENDIX E COST ANALYSIS

Institutional Controls Initial Start up Costs				
ltem	Quantity	Unit	Unit Cost	Cost
Administrative Costs	09	HR	\$60.00	\$3,600.00
Integration into GIS Mapping System	160	H	\$80.00	\$12,800.00
City Street Cut Permit	24	H	\$80.00	\$1,920.00
City Resolution	80	光	\$140.00	\$11,200.00
Deed Restrictions	80	光	\$140.00	\$11,200.00
2hr Asbestos Awareness Training	10	EMP	\$400.00	\$4,000.00
Interdepartmental Coordination	_	FS	\$4,000.00	\$4,000.00
			Total	\$48,720.00

Operation and Maintenance Initial Start up Costs for Wallace Street	Ð			
ltem	Quantity	Unit	Unit Cost	Cost
Initial Inspection	16	HR	\$80.00	\$1,280.00
Coordination with Maintenance Department	∞	H	\$80.00	\$640.00
Preparation of Inspection Report	24	HR	\$80.00	\$1,920.00
On-site Monitoring during Initial repairs	40	HR	\$80.00	\$3,200.00
Project Completion Report	32	H	\$80.00	\$2,560.00
Initial Asbestos Training (assume 40 hr plus cost of training for 10 employee)	10	EMP	\$4,200.00	\$42,000.00
			Total	\$51,600.00

Operation and Maintenance Annual Costs for Wallace Street	d)			
ltem	Quantity	Unit	Unit Cost	Cost
Annual Inspection	4	H	\$80.00	\$320.00
Coordination with Maintenance Department	2	H	\$80.00	\$160.00
Preparation of Inspection Report	80	H	\$80.00	\$640.00
On-site Monitoring during repairs	16	HR	\$80.00	\$1,280.00
Project Completion Report	80	HR	\$80.00	\$640.00
Annual Asbestos Refresher (assume 8 hours plus cost of training)	10	EMP	\$1,000.00	\$10,000.00
			Subtotal	\$13,040.00

Net Present Value 3.0% 30 Years \$255,000.00

Protective Measures Mill and Overlay of for Wallace Street				
ltem	Quantity	Unit	Unit Cost	Cost
Traffic Control	-	FS	\$5,000.00	\$5,000.00
Existing Manhole Covers to Adjust	9	EA	\$129.00	\$774.00
Existing Water Valve Boxes and Curb Stops to Adjust	10	EA	\$129.00	\$1,290.00
SS-1 or SS-2 Asphalt Tack Coat (0.10 gal per sy)	3944	SY	\$1.21	\$4,772.24
Asphalt Repair in highly deteriorated areas (assume 200sy)	_	rs	\$10,000.00	\$10,000.00
Asphalt Paving Fabric (Mirifi 140)	400	SY	\$4.00	\$1,600.00
Milling (2in x2ft around curb and gutter)	009	sy	\$3.50	\$2,100.00
Asphalt Concrete Pavement - 3-in Surface Course	618	Ton	\$69.50	\$42,951.00
	57	Subtotal		\$68,487.24
)	Contingency	20%	\$13,697.45
		Total		\$82,184.69

Excavation and Disposal for Wallace Street (No Asbestos Material)				
Item	Quantity	Unit	Unit Cost	Cost
Wallace from Main to Church				
Traffic Control	~	ST	\$5,000.00	\$5,000.00
Concrete Removal	488	SY	\$11.75	\$5,734.00
Existing Manhole Covers to Adjust	9	EA	\$129.00	\$774.00
Existing Water Valve Boxes and Curb Stops to Adjust	10	EA	\$129.00	\$1,290.00
Excavation Above Subgrade (6-in asphalt)	611	C	\$10.00	\$6,110.00
Excavation 12-in Subgrade	1211	ζ	\$8.00	\$9,688.00
Subexcavation/Replacement Below Subgrade (Replacement with Imported Materials)	0	ζ	\$125.00	\$0.00
3/4-inch Minus Crushed Base Course	1211	ζ	\$47.16	\$57,110.76
Asphalt Concrete Pavement - 3-in Base Course	1240	Ton	\$61.50	\$76,260.00
Asphalt Concrete Pavement - 3-in Surface Course	618	Ton	\$69.50	\$42,951.00
Combined Concrete Curb and Gutter	2200	H	\$15.00	\$33,000.00
Concrete Sidewalk	4392	SF	\$4.00	\$17,568.00
Painted Traffic Lines and Markings	10	Gallon	\$50.00	\$500.00
			Subtotal	\$255,985.76
		Contingency	20%	\$51,197.15
			TOTAL	\$307,182.91

Excavation and Disposal for Wallace Street (Asbestos Material to 3-ft)				
ltem	Quantity	Unit	Unit Cost	Cost
Wallace from Main to Church				
Traffic Control	_	ST	\$5,000.00	\$5,000.00
Concrete Removal	488	SY	\$11.75	\$5,734.00
Existing Manhole Covers to Adjust	9	EA	\$129.00	\$774.00
Existing Water Valve Boxes and Curb Stops to Adjust	10	EA	\$129.00	\$1,290.00
Excavation Above Subgrade (6-in asphalt)	611	ζ	\$125.00	\$76,375.00
Excavation 12-in Subgrade	1211	ζ	\$125.00	\$151,375.00
Subexcavation/Replacement Below Subgrade (Replacement with Imported Materials)	3666	ζ	\$125.00	\$458,250.00
3/4-inch Minus Crushed Base Course	1211	ζ	\$47.16	\$57,110.76
Asphalt Concrete Pavement - 3-in Base Course	618	Ton	\$61.50	\$38,007.00
Asphalt Concrete Pavement - 3-in Surface Course	1240	Ton	\$69.50	\$86,180.00
Combined Concrete Curb and Gutter	2200	H	\$15.00	\$33,000.00
Concrete Sidewalk	4392	SF	\$4.00	\$17,568.00
Painted Traffic Lines and Markings	10	Gallon	\$50.00	\$500.00
			Subtotal	\$931,163.76
		Contingency	20%	\$186,232.75
			TOTAL	\$1,117,396.51

APPENDIX F

RESOLUTION NO. ##, DEED RESTRICTIONS AND STREET CUT PERMIT APPLICATION

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF BOZEMAN, MONTANA PROVIDING FOR THE DEVELOPMENT AND IMPLEMENTATION OF ASBESTOS RELATED INFORMATION WITHIN THE RECORDS OF THE CITY OF BOZEMAN, MONTANA FOR THE PURPOSE OF INFORMING PERSONS PERFORMING EXCAVATION WORK ON STREETS OF LOCATIONS OF OBSERVED OR POTENTIAL ASBESTOS.

WHEREAS, the City of Bozeman, Montana designed and implemented a voluntary cleanup plan for the abatement of asbestos in and around the CMC East Main depot site, also known as the CMC Asbestos Bozeman Comprehensive Environmental Cleanup and Responsibility Act Facility; and

WHEREAS, there are within the site areas of observed asbestos and areas of potential asbestos as described on Attachment "A" which is incorporated herein; and

WHEREAS, within the Municipal Code of the City of Bozeman Section 12.12.030 provides, in part, that no person shall tear up any pavement or sidewalk, dig any hole or otherwise excavate from any street, avenue, alley or public place without first having obtained a permit from the Director of Public Service or its designee; and

WHEREAS, it is the desire and intention of the City Commission to develop and implement a process for identifying observed and potential asbestos locations within the GIS information system to be reviewed by city personnel before excavation permits can be obtained.

NOW THEREFORE BE IT RESOLVED by the City Commission of the City of Bozeman, Montana:

Section 1: That the City of Bozeman, through its Public Service Department, will incorporate into the appropriate City Health and Safety Plan a 2-hour annual asbestos awareness training for employees who may be involved in projects or response actions in the areas of observed or potential asbestos, including but not limited to Water/Sewer, Streets, and Public Service Department employees. The asbestos awareness training will be implemented by providing annual training with asbestos training course provider covering the OSHA required curriculum set forth in 29 CFR 1926.1101(k)(9)(vi) et. seq. and as it applies to public sector employees as per 24.30.102, ARM.

<u>Section 2</u>: That the City of Bozeman, through its personnel including its city engineers, shall implement

in its GIS mapping system the areas of observed, and potential asbestos within the CMC East Main depot site in such a manner that a person obtaining an excavation permit will be informed that the permittee may be excavating in an observed or potential area of asbestos.

<u>Section 3</u>: That the City of Bozeman will deliver to the Montana Department of Transportation (MDT) for its records a map that depicts areas of observed or potential asbestos as set out on Exhibit "A" and thereafter updated annually so that employees of MDT when digging on highways in the areas on Exhibit "A" under its jurisdiction are aware of the map indicating observed or potential areas of asbestos. Maps will specifically be delivered to the Bozeman Area Office of the MDT Butte Division and to MDT Environmental Services in Helena.

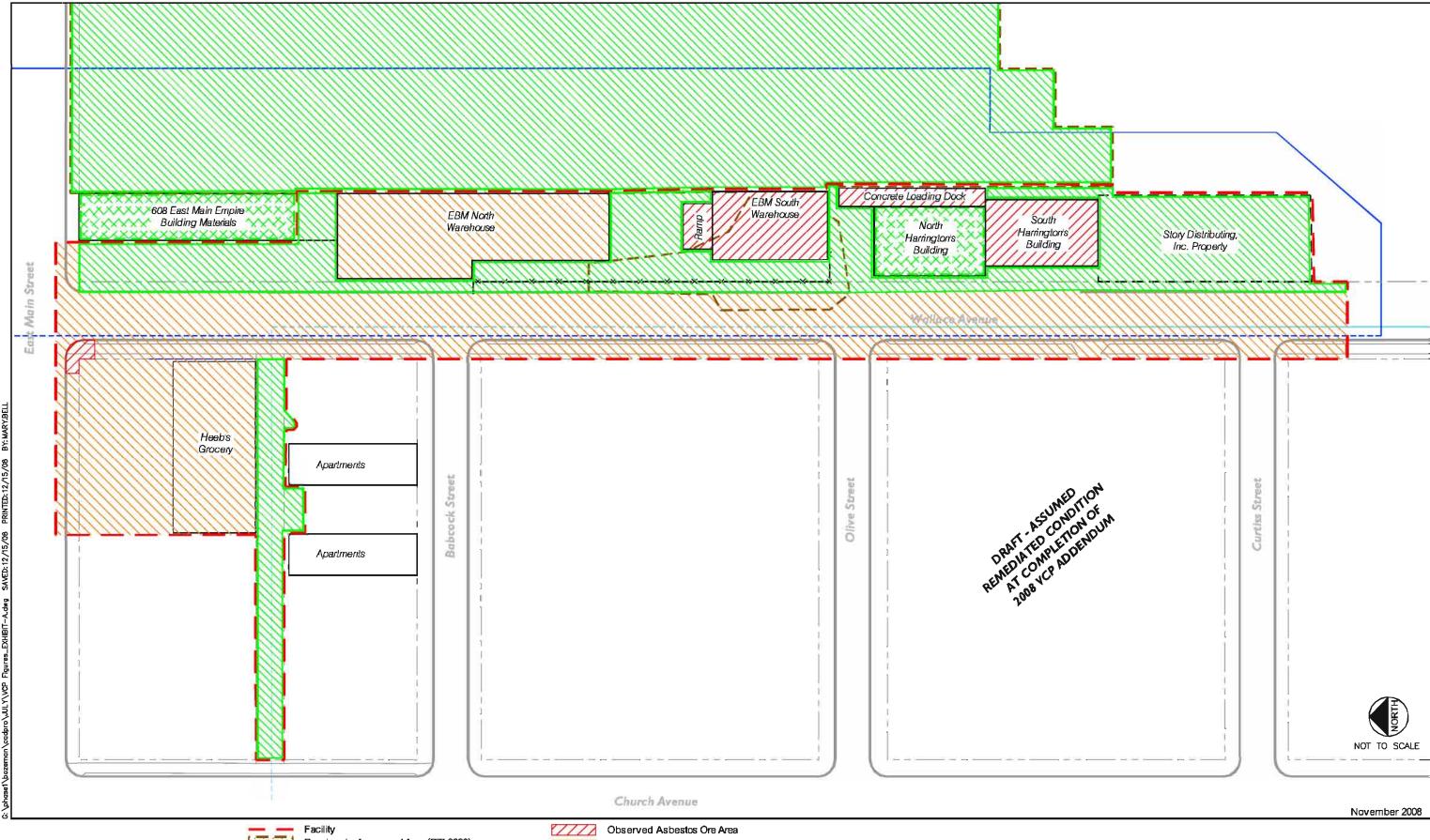
<u>Section 4</u>: That the permittee will be informed in writing that should the permittee indicate excavation will be in an observed or potential area of asbestos contamination, a provision for the proper management of any asbestos encountered, including removal, transportation, and disposal, of asbestos contamination by a State of Montana accredited abatement and permitted asbestos project contractor is required. State of Montana accredited asbestos project contractor/supervisor must be present during the excavation of each new area to provide visual identification of any asbestos. If suspected asbestos contamination is encountered, the Montana accredited project contractor/supervisor must collect samples of the suspected asbestos containing material on the property to determine the presence or absence of asbestos. If asbestos is present, the permittee must properly manage the asbestos in compliance with all local, state and federal laws and regulations.

<u>Section 5</u>: In order to provide City employees with the information and locations of observed and potential asbestos, each department of the City having responsibility for utility line installation, repair or removal and street and sidewalk installation and repair shall be given and utilize the GIS information system in excavating or repairing utility lines, streets and sidewalks in the area described on Exhibit "A".

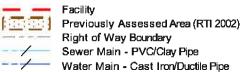
This Resolution shall be in full force and effect 30 days after its final adoption.

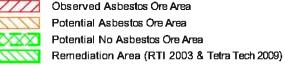
Passed, unanimously adopted and approved by the City Commission of the City of Bozeman, Montana on second reading at a

regular session hereof h 2008.	neld on the	day of,
	Mayor	
	Mayor	
ATTEST:		
City Clerk	-	
City Attorney	-	









DECLARATION OF RESTRICTIVE COVENANTS ON REAL ESTATE PURSUANT TO § 75-10-727, MONTANA CODE ANNOTATED

THIS DECLARATION OF RESTRICTIVE COVENANTS ON REAL ESTATE PURSUANT TO § 75-10-727, MCA (Declaration) is made by [insert name of property owner] as of [insert date].

RECITALS

WHEREAS [property owner] is the owner of certain interests in real property in Gallatin County, Montana upon which asbestos ore has come to be located (Property); and

WHEREAS on December 20, 2002, the Montana Department of Environmental Quality (DEQ) approved a Voluntary Cleanup Plan (VCP) submitted by the City of Bozeman (City), to investigate and remediate certain asbestos ore contamination present at the CMC Asbestos Bozeman Comprehensive Environmental Cleanup and Responsibility Act (CECRA), §§ 75-10-701 through 752, MCA, Facility (Facility); and

WHEREAS in August 2007, the City; Empire Building Materials, Inc.; Harrington's, Inc; Story Distributing Company; Pacific Hide & Fur Depot d/b/a Pacific Steel and Recycling; and Simgraf Corp. entered into a Stipulated Agreement pursuant to the Controlled Allocation of Liability Act, §§ 75-10-742 through 752, MCA, part of CECRA, to address the Facility, and to allocate liability for remedial actions (Stipulated Agreement), attached hereto as Exhibit A; and

WHEREAS the City, as designated lead potentially liable person for the Facility under § 75-10-746, MCA, has performed certain voluntary remedial actions at the Facility to investigate and remediate contamination at the Facility; and

WHEREAS the City has identified certain, currently inaccessible areas on the Property that are suspected to contain asbestos ore, including underneath any asphalt pavement, Portland cement concrete, and buildings and/or structures present on the Property; and

WHEREAS [property owner's name] has agreed to record institutional controls on the Property to mitigate the risk posed to the public health, safety, and welfare and the environment by imposing certain restrictions on the Property.

NOW THEREFORE, pursuant to § 75-10-727, MCA, [property owner name] hereby agrees and declares that the restrictions outlined in below shall be placed on the following Property:

[Insert legal description and "commonly known as" description of the restricted property]

1. Prior to disturbing any asphalt pavement or concrete present on the Property, the current owner of the Property shall ensure that a Montana-accredited

Contractor/Supervisor is present to inspect, and if necessary sample, the Property for the presence of asbestos. If the inspection and sampling reveals the presence of asbestos on any portion of the Property, prior to disturbing any additional pavement or concrete, the current owner of the Property shall have a Montana-accredited Contractor/Supervisor remove, transport and dispose of the asbestos in compliance with all applicable state and federal environmental requirements, criteria, and limitations. In compliance with current US Environmental Protection Agency guidance, confirmation samples must be collected to demonstrate that the asbestos contamination has been completely removed from the Property.

- 2. Prior to removing, remodeling, or demolishing any building or structure currently present on the Property, the current owner of the Property shall ensure that a Montana-accredited Contractor/Supervisor is present to inspect, and if necessary sample, the Property for the presence of asbestos. If the inspection and sampling reveals the presence of asbestos on any portion of the Property, prior to removing, remodeling, or demolishing the building or structure, the current owner of the Property shall have a Montana-accredited Contractor/Supervisor remove, transport and dispose of the asbestos in compliance with all applicable state and federal environmental requirements, criteria, and limitations. In compliance with current US Environmental Protection Agency guidance, confirmation samples must be collected to demonstrate that the asbestos contamination has been completely removed from the Property.
- 3. Prior to any change in use of the Property, including by way of example and not by limitation, any change to park, open space or residential use, the current owner of the Property shall ensure that a Montana-accredited Contractor/Supervisor is present to inspect, and if necessary sample, the Property for the presence of asbestos. If the inspection and/or sampling reveals the presence of asbestos on any portion of the Property, prior to any change in use, the current owner of the Property shall have a DEQ Montana-accredited Contractor/Supervisor remove, transport and dispose of the asbestos in compliance with all applicable state and federal environmental requirements, criteria, and limitations. In compliance with current US Environmental Protection Agency guidance, confirmation samples must be collected to demonstrate that the asbestos contamination has been completely removed from the Property.
- 4. The deed-restricted Property is depicted shaded in gray on the figure dated _____, attached hereto as Exhibit B.
- 5. (Property owner's name) agrees to provide DEQ and its representatives and contractors and all representatives and contractors of any person conducting remedial actions approved by DEQ on the Property access at all reasonable times to the Property.

- 6. DEQ shall be entitled to enforce these covenants as an intended beneficiary thereof. (Property owner's name) specifically agrees that the remedy of "specific performance" shall be available to DEQ in such proceedings.
- 7. The provisions of this Declaration governing the use restrictions of the Property shall run with the land and bind all holders, owners, lessees, occupiers, and purchasers of the Property. These restrictive covenants apply in perpetuity and every subsequent instrument conveying an interest in all or any portion of the Property shall include these Restrictive Covenants. A property owner may request DEQ approval to remove all or a portion of the institutional controls from the real property in accordance with § 75-10-727, MCA.
- 8. (Property owner's name) shall cause the requirements of these Restrictive Covenants to be placed in all instruments that convey an interest in the Subject Property and shall file this document with the county clerk and recorder in Gallatin County, Montana.
- 9. The rights provided to DEQ in this declaration include any successor agencies of DEQ.

RESTRICTIVE COVEN	OF, [property owner] has executed this DECLARATION OF JANTS ON REAL ESTATE PURSUANT TO § 75-10-727, NOTATED as of
(property owner's name)	
Ву:	
State of Montana) :ss.
County of Gallatin)
a Notary Public for the S subscribed to the within	f, 2008, personally appeared, before measure of Montana, known to me to be the person whose name is instrument and acknowledged to me that he executed the same, rt name of property owner).
IN WITNESS W seal the day and year her	HEREOF I have hereunto set my hand and affixed my official reinabove first written.
(SEAL)	NOTARY PUBLIC FOR THE STATE OF MONTANA Residing at
	My Commission Expires:

EXHIBIT A

STIPULATED AGREEMENT

This Stipulated Agreement ("Agreement") is by and between the City of Bozeman, a political subdivision of the State of Montana with address of P.O. Box 1230, Bozeman, Montana 59771-1230; Empire Building Materials, Inc., a Montana corporation with address of P.O. Box 220, Bozeman, Montana 59771; Harrington's, Inc., a Montana corporation with address of 3125 West Babcock St., Bozeman Montana 59715; Pacific Hide & Fur Depot, dba Pacific Steel & Recycling, a Montana corporation with address of P.O. Box 1549, Great Falls, Montana 59401; Simgraf Corp., a Montana corporation with address of P.O. Box 938, Bozeman, Montana 59771; and Story Distributing Company, a Montana corporation with address of P.O. Box 1201, Bozeman, Montana 59771 (hereinafter the "Signatories").

This Stipulated Agreement is entered into pursuant to the Controlled Allocation of Liability Act (CALA), Mont. Code Ann. §§ 75-10-742 through 752, part of Montana's Comprehensive Environmental Cleanup and Responsibility Act (CECRA), Mont. Code Ann.§§ 75-10-701, et seq., to address the CMC Asbestos Bozeman CECRA Facility (Facility). It is presented to the Montana Department of Environmental Quality (DEQ) for review and approval as required by Mont. Code Ann. § 75-10-750(10), any person who did not participate in the allocation but who is assigned a share of liability may sign this Stipulated Agreement. As provided for in Mont. Code Ann. § 75-10-750(11), any person allocated a share of liability who does not sign this Stipulated Agreement remains jointly and severally liable for the release or threatened release of hazardous or deleterious substances from the Facility as provided for in Mont. Code Ann. § 75-10-715.

WHEREAS, the City of Bozeman purchased property within the CMC Asbestos Bozeman CECRA Facility ("Facility") in order to build a new public library. The Facility was known to be contaminated with asbestos at the time the City of Bozeman purchased the property.

WHEREAS, the City of Bozeman submitted a *Voluntary Cleanup Plan* ("VCP") pursuant to the Voluntary Cleanup and Redevelopment Act ("VCRA"), Mont. Code Ann. §§ 75-10-730 through 738, to DEQ in order to remediate contamination within the Facility. The DEQ approved the City's VCP on December 20, 2002. The City implemented the VCP and its addendums and submitted a *Voluntary Cleanup Completion Report for the CMC East Main Depot Site* in August 2004.

WHEREAS, the City of Bozeman petitioned the DEQ on July 23, 2003, for an allocation of liability pursuant to CALA, Mont. Code Ann. §§ 75-10-742 through 752, to allocate potential liability at the Facility.

WHEREAS, the City of Bozeman has incurred significant remediation costs and is currently the lead person for the Facility and is therefore eligible for reimbursement pursuant to Mont. Code Ann. § 75-10-743(5), according to the percentage of allocation agreed to by the Signatories and approved by the DEQ.

WHEREAS, based upon new information discovered during the implementation of the VCP DEQ issued a supplemental scope of work for the Facility on November 22, 2006. The City provided the DEQ with a work plan on June 1, 2007.

WHEREAS, the Signatories participated in negotiations in order to attempt to allocate potential liability at the Facility pursuant to the terms of Mont. Code Ann. § 75-10-748.

WHEREAS, the Signatories and DEQ, as representative of the Orphan Share, have reached an agreement on the allocation of liability at the Facility for each of the Signatories and the orphan share, and the terms of Mont. Code Ann. § 75-10-748(3) require the Signatories to execute a Stipulated Agreement in accordance with Mont. Code Ann. § 75-10-750.

WHEREAS, Mont. Code Ann. § 75-10-750(8) requires the Stipulated Agreement to contain the following specific elements:

- (a) the percentage share of liability for each person;
- (b) procedures for paying for the orphan share prior to reimbursement from the orphan share fund;
- (c) a waiver of contribution rights against all person who are potentially liable for the remedial action as well as a waiver of any rights to challenge any settlement that the DEQ enters into with any other potentially liable person;
- (d) covenants not to sue and provisions regarding performance or adequate assurance of performance of remedial actions;
- (e) how remedial actions will be conducted;
- (f) a penalty provision in accordance with Mont. Code Ann. § 75-10-750(12);
- (g) acknowledgement of contribution protection, consistent with Mont. Code Ann. § 75-10-719(1), regarding matters addressed in the settlement; and,
- (h) provisions detailing how the persons signing the stipulated agreement should receive reimbursement from the orphan share fund for any remedial action costs incurred by the person in excess of their allocated share.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, it is agreed that:

1. The Percentage Share of Liability for Each Person. According to the settlement reached between the Signatories, the allocation of liability is as follows:

City of Bozeman 1.0%

Empire Building Materials, Inc. 1.5%

Harrington's, Inc.	2.5%
Pacific Hide & Fur Depot dba Pacific Steel & Recycling	15.0%
Simgraf Corp.	0.0%
Story Distributing Company	1.0%
Orphan Share	79.0%

Based on the evaluation of the factors set forth in Mont. Code Ann.§ 75-10-750(5) applicable to Story Distributing Company, if DEQ subsequently determines through confirmation sampling results or otherwise that no contamination requiring cleanup remains on property owned by Story Distributing Company, the 1.0% of liability allocated to Story above shall revert to the Orphan Share. In such a case, the Orphan Share shall be allocated 80% and Story shall be allocated 0%.

2. <u>Procedures for Paying for the Orphan Share Prior to Reimbursement from the Orphan Share Fund.</u>

A. Remedial Action Costs.

As provided in Mont. Code Ann. § 75-10-743(5), reimbursement from the orphan share fund must be limited to actual documented remedial action costs incurred after the date of a petition provided for in Mont. Code Ann. § 75-10-745. Reimbursement may not be made for attorneys fees, legal costs, or operation and maintenance costs.

For post-petition remedial action costs that have been incurred and invoiced by DEQ, the City of Bozeman has paid the Orphan Share's proportional share. As provided for in Mont. Code Ann. § 75-10-743(6)(b), the City of Bozeman has a claim against the orphan share fund for those costs.

Future remedial action costs, including those incurred by DEQ but not yet invoiced, shall be paid in full by the City of Bozeman, or any subsequent lead person. The City of Bozeman (and any subsequent lead person) has a claim against the orphan share fund for the Orphan Share's proportional share of those costs. Non-lead Signatories shall reimburse the lead person for future remedial action costs in proportion to their respective share of liability as set forth in Section 1, unless otherwise agreed by the lead person.

B. Orphan Share Defense Costs.

As provided for in Mont. Code Ann. § 75-10-743(6)(a), costs incurred by DEQ in defending the orphan share must be paid by the persons participating in the allocation in proportion to their allocated shares. The City agrees that 1% of the costs incurred by DEQ in defending the Orphan Share will be deducted from any reimbursement it is due from the Orphan Share Fund, and any other person who signs this Stipulated Agreement agrees to pay costs incurred by DEQ in proportion to their allocated share of liability, within 60 days of receipt of an invoice from DEQ.

3. Waiver of Contribution Rights Against all Persons who are Potentially Liable for the Remedial Action as well as a Waiver of any Rights to Challenge any Settlement that the Department Enters into with any Other Potentially Liable Person. All persons who sign this Stipulated Agreement waive their contribution rights against all other potentially liable persons who are signatories to this Agreement, except to the extent of each person's allocated share of liability under this Agreement.

In addition, all persons who sign this Stipulated Agreement waive any and all rights they may have to challenge any settlement that DEQ enters into with any other potentially liable person.

All persons who sign this Stipulated Agreement agree that neither this Agreement nor any of its provisions are appealable to the Board of Environmental Review, to any governmental agency or officer, or to any court in law or equity. All persons who sign this Stipulated Agreement agree that this Agreement is a full, final, and consensual contractual understanding between the persons who sign this Stipulated Agreement and DEQ, as the entity approving this Agreement.

4. Covenants not to Sue and Provisions Regarding Performance or Adequate Assurance of Remedial Actions. The Signatories agree and covenant not to sue any other person who signs the Agreement for the matters covered by this Stipulated Agreement, so long as that person performs the obligations required by the Agreement. Notwithstanding the foregoing, nothing in the above provision or in this Stipulated Agreement affects any contractual obligations between any of the Signatories, or the right of any such party to enforce those obligations through a lawsuit or otherwise.

The City, the designated lead person for the Facility, agrees to conduct remedial actions at the Facility as directed or approved by DEQ consistent with CECRA (Mont. Code Ann. §§ 75-10-701 through 752).

If DEQ notifies the Signatories in writing that DEQ has determined that the lead person is financially or otherwise incapable (after considering any hardship determination or application for hardship determination) of completing any Remedial Action as required or approved by DEQ, the Signatories shall designate another lead person and notify DEQ in writing of the designation within 30 days of DEQ's notification. If the new designated lead is not approved by DEQ, DEQ will designate another lead person and notify the Signatories of the designation. If the Signatories do not timely designate another lead person or if the new designated lead does not accept and timely complete all the responsibilities of the lead person, this Agreement shall be void and all Signatories shall be subject to liability as provided in Mont. Code Ann. § 75-10-715, but retain all defenses set forth by Mont. Code Ann. § 75-10-715.

If DEQ notifies the Signatories in writing that the lead person is out of compliance with a remedial action required or approved by DEQ, the Signatories shall have 30 days from receipt of the notice to cure the non-compliance. If the non-compliance is not cured within that 30 days, and DEQ has determined the noncompliance is not due to good cause, as defined in Mont. Code Ann. § 75-10-746(9), this Agreement shall be void and all Signatories shall be subject to liability

as provided in Mont. Code Ann. § 75-10-715, but retain all defenses set forth by Mont. Code Ann. § 75-10-715.

5. How Remedial Actions Will be Conducted

The lead person shall perform all remedial actions as required or approved by DEQ.

The lead person will satisfy the requirements of the November 22, 2006, Scope of Work (SOW) and remaining contamination at the Facility will be addressed through two addenda to the DEQ-approved 2002 Voluntary Cleanup Plan (VCP). The addenda will be subject to appropriate Voluntary Cleanup and Redevelopment Act (VCRA) requirements, such as evaluation and comparison of proposed remedial alternatives and public notification. The addenda must, at a minimum, address accessible asbestos contamination and any contamination to which exposure is likely based on current or reasonably anticipated future uses. In addition, the addenda must provide an appropriate remedy or remedies for any asbestos located in areas where exposure is currently unlikely but where property use may change.

Based upon available information, and subject to and in accordance with the findings resulting from the approved Supplemental Investigation Work Plan, the first addendum to the VCP must provide for excavation and encapsulation in the Wallace Avenue utility corridor, removal of asbestos contamination under Wallace Avenue and in areas adjacent to the south and east sides of Harrington's southern building addition, removal of accessible asbestos contamination on Empire Building Materials property, and any required confirmation sampling. The second addendum must present a comparison of alternatives for contamination not addressed in the first addendum, present any specifics regarding proposed institutional controls, and address concerns that may arise through the indoor air investigation on Harrington's property.

Facility cleanup under the 2002 VCP must be completed within the time constraints specified in § 75-10-736, MCA. Implemented remedial actions will be summarized in a VCP Construction Completion Report as per § 75-10-736(11), MCA, and as outlined in the *Voluntary Cleanup and Redevelopment Act Application Guide* (August 2002).

If, in the future, property uses change, modifications are proposed for structures that currently prevent access and exposure to the contamination, or DEQ requires additional cleanup, the lead person will address remaining contamination through submittal of a new VCP to DEQ for approval.

The lead person shall be deemed in non-compliance with a remedial action required or approved by DEQ if the lead person fails to submit any VCP addendum or new VCPs as contemplated in this Agreement; fails to submit any plans, including work plans, sampling and analysis plans, etc.; fails to modify any plans or submittals as required by DEQ; fails to timely implement the approved VCP work; or fails to take any other remedial actions as approved or required by DEQ. Any such non-compliance will be subject to the notice of non-compliance and termination provisions set forth in the last paragraph of Section 4 of this Agreement.

- 6. Penalty Provision in Accordance with Mont. Code Ann. § 75-10-750(12). Subject to the agreements, if any, between the Signatories regarding payments to each other of their allocated share of liability under this Agreement, any Signatory to this Agreement that fails to comply with its terms shall pay, in addition to the Signatory's share of remedial action costs, a penalty of two times the amount of the Signatory's allocated share of liability. Payment of penalties under this provision must be applied to the orphan's share, and any amount in excess of the orphan's share must be deposited in the orphan share fund.
- 7. Acknowledgement of Contribution Protection, Consistent with Mont. Code Ann. § 75-10-719(1), Regarding Matters Addressed in the Settlement. The Signatories acknowledge that they will receive contribution protection from each other for all matters addressed in this Stipulated Agreement, provided they comply with the terms of this Agreement. This Stipulated Agreement does not discharge any other liable persons, nor does it provide contribution protection to any other person, unless DEQ enters into a separate settlement agreement with the person that does contain contribution protections as provided for in Mont. Code Ann. § 75-10-719. If the DEQ enters into a settlement agreement with a liable person not signing this Stipulated Agreement, that agreement must address reduction of the Signatories' liability and the Orphan Share by the amount of the settlement.
- 8. Provisions Detailing how the Persons Signing the Stipulated Agreement Should Receive Reimbursement from the Orphan Share Fund for any Remedial Action Costs Incurred by the Persons in Excess of Their Allocated Share. With one exception, Mont. Code Ann. § 75-10-743(4), provides that no reimbursement may be made from the orphan share fund until all remedial actions, except for operation and maintenance, are complete. The exception to this provision is for a hardship reimbursement under Mont. Code Ann. § 75-10-743(7). If the lead person presents evidence to the DEQ that the person cannot complete the remedial actions without partial reimbursement, the DEQ may reimburse a claim prior to the completion of all remedial actions.

The City has incurred remedial action costs in performing remedial actions at the Facility under an approved Voluntary Cleanup Plan. The City's actual documented remedial action costs incurred after the date of the CALA petition, excluding attorneys fees, legal costs, and operation and maintenance costs, are eligible for reimbursement in accordance with Mont. Code Ann. § 75-10-743 and the allocation percentages set forth in this Agreement. Such reimbursement shall be made, subject to the provisions of Mont. Code Ann. § 75-10-743 and the terms of any hardship determination by DEQ, within sixty (60) days after DEQ has issued a closure letter for the Facility. The closure letter will be issued upon DEQ's determination that the requirements for remedial action set forth in Mont. Code Ann. § 75-10-721 have been met for the Facility, based on current and reasonably anticipated future land uses. Additional cleanup actions after issuance of the closure letter, based upon property use changes, modifications of structures, or other factors, may be required by DEQ based on the conditions at the Facility at that time, but will not delay reimbursement of actual documented remedial action costs incurred by the City prior to the issuance of the closure letter.

any purpose other than this Stipulated Agreement. 10. Persons Bound. The Signatories agree to abide by the terms of this Agreement. 11. Authorized Signatures. The undersigned affirm that they are duly authorized to sign on behalf of the persons for whom they sign. CITY OF BOZEMAN Date: _____ EMPIRE BUILDING MATERIALS, INC. Date: _____ HARRINGTON'S, INC. Date: Date: 8-7-07 SIMGRAF CORP. Date: _____

9. No Admission of Liability. By signing this Stipulated Agreement, no party admits liability for

STORY DISTRIBUTING CO.

Ву:	Date:	_
Name		

CITY OF BOZEMAN STREET DEPARTMENT P.O. Box 1230 Bozeman, Montana 59771-1230

STREET CUT PERMIT APPLICATION

TO BE COMPLETED BY APPLICANT (CONTRACTOR):
Applicant's Name:	Telephone:
Applicant's Address:	
Contractor (If other than Applicant):	Telephone:
Street to be cut: Locatio	on of cut:
The street to be cut is on or adjacent to Wallac If yes, please initial that you have read Section	n 17 below. Initials of applicant:
Project Name:	
Purpose of Street Cut:	
Dimensions of Street Cut:	
Type of Street Surface:	
Street Classification: Local	Collector Arterial
Street Closure requested to complete work: _ Plan) No	Yes (If yes, attach detailed Traffic Control

The Applicant, herein termed the Permittee, requests permission to make a street cut as described and shown on attached plot plan which by reference is made a part of this application. (APPLICANT MUST SIGN ON LAST PAGE OF THIS APPLICATION).

INSTRUCTIONS CONCERNING USE OF THIS FORM

Applicant will complete and return this form to the City Engineer whose office is located at 20 E. Olive Street, Bozeman, Montana .

The Public Service Director, in conjunction with the City Street Superintendent, is delegated authority to approve street cut permits within the City limits of Bozeman, Montana.

Applications should be submitted a minimum of two (2) weeks prior to projected work date.

Permit Fee Calculation		
Dimensions of Cut: x	=	_ Square Feet
Additional 3' width around cut:	=	_ Square Feet
Total:	=	_ Square Feet
Pavement Degradation Fee:	(Total Square Feet) x \$0	0.45 = \$
Degradation Fee Surcharge:	(Total Square Feet) x \$_	= \$
Application Fee:		\$ 50.00
Total Permit Fee:		\$
Permit Application and Fee received:	By:	

STREET CUT PERMIT

SUBJECT to the following terms and conditions, the permit applied for on the first page hereof is hereby granted:

- 1. <u>TERM.</u> This permit shall be in full force and effect from the date hereof until revoked as herein provided.
- 2. **PERMIT FEE.** This permit may be issued only after all approval signatures are obtained and any applicable permit fees, as established by City Commission resolution, are paid by the Permittee. A "Street Cut Fee Schedule" is attached as Exhibit "A" to this application and shall be used to calculate the permit fee.
- 3. **REVOCATION.** This permit may be revoked by the City upon giving thirty (30) days notice to the Permittee by ordinary mail, directed to the address shown in the application hereto attached; however, the City reserves the right to revoke this permit without giving said notice in the event Permittee fails to comply with any of the conditions or terms set forth herein.
- 4. WORK STANDARDS. All work shall be done in accordance with the Montana Public Works Standard Specifications, Fourth Edition, January, 1996, as modified by the City of Bozeman. City modifications to the Montana Public Works Standard Specifications can be obtained at the office of the City Engineer, 20 E. Olive, Bozeman, Montana.
- 5. **COMMENCEMENT OF WORK.** Upon approval of this Permit, the Permittee shall notify the Street Superintendent 48 hours in advance of any work.
- 6. PAVEMENT DEGRADATION FEES. Permits for excavations in paved streets or alleys shall be subject to a pavement degradation fee. Newly constructed streets, re-constructed streets, or streets that have been re-paved shall be considered protected streets for a period of five years following construction. Permits for excavations in protected streets shall be subject to an additional pavement degradation fee surcharge. Pavement degradation fees or surcharges shall not be required for the following: emergency utility repair work; installation of new fire sprinkler service lines required by the Fire Marshall, if no alternate connection point is available; or for infrastructure improvement work being done under the City's Capital Improvements Program.
- 7. CITY HELD HARMLESS FROM CLAIMS. In accepting this permit, the Permittee, its/his/her successors or assigns, agrees to indemnify the City and hold it harmless from all claims, actions, liability, and damage of every kind and description which may accrue to, or be suffered by, any person or persons, corporations or property by reason of the performance of any such work, character of materials used, or manner of installations, maintenance and operation, or by the improper occupancy of said roadway right-of-way, and in case any suit or action is brought against the City and arising out of, or by or by reason of, any of the above causes, the Permittee, its/his/her successors or assigns, will upon notice to it/him/her of the commencement of such action, defend the same at its/his/her sole cost and expense and satisfy any judgement which may be rendered against the City in any such suit or action. City includes its officers, employees, agents and assigns.

The Permittee shall obtain the necessary insurance coverages for the proposed excavation work as specified in Exhibit "B".

Permittee hereby waives any rights of subrogation with regards to workers compensation coverage it may have, or may require in the future, regarding the Work performed by Permittee and their Sub-Contractors. In the event Permittee uses Sub-Contractors to perform any portion of the Work, the Permittee will obtain a "Waiver of Subrogation" regarding workers compensation from that Sub-Contractor.

- 8. <u>STREET OPENING BONDS</u> For each street cut permit, street opening bonds submitted on approved bond forms (see Exhibit "C") shall be provided in the amount of \$5000 or 100% of the cost of the work, whichever is greater, as surety for satisfactory completion of the work contemplated and maintenance of the competed work. The bond shall be valid for a period of at least one year following acceptance of the restoration by the City.
- 9. **PROTECTION OF TRAFFIC.** Insofar as the interests of the City and the traveling public are concerned, all work performed under this permit shall be done in accordance with the Montana Public Works Standard Specifications, Fourth Edition, January 1996, as modified by the City of Bozeman. All construction zones shall be signed in accordance with the Manual of Uniform Traffic Control Devices.
- 10. **STREET CLOSURES.** If a street closure is approved to complete the proposed work, the following shall apply:
 - a) The approved Traffic Control Plan shall be adhered to at all times by the Permittee, and all signs, barricades, and other traffic control devices shall be maintained in place prior to intitiation of any work and until the work is completed.
 - b) At least 24 hours prior to closing the street, the permittee shall notify the Police and Fire Departments, Ambulance services, property owners residing within the portion to be closed, and (if applicable) school bus operators of the intended street closure, and shall promptly notify them once the street has been re-opened.
 - c) For closures of collector or arterial streets, the Permittee shall in addition to b) above, send a press release to the Bozeman Daily Chronicle newspaper and local radio stations detailing the intended street closure at least two days in advance of any work.

11. EXISTING UNDERGROUND UTILITIES.

- a) It shall be the responsibility of the Permittee to contact all pertinent utility companies by calling the Utilities Underground Location Center (One Call) at 1-800-424-5555 at least two business days prior to starting any excavation.
- b) Any underground utility which is damaged by a Permittee shall be repaired at the Permittee's expense in the manner and means prescribed by the authorized representative of the utility owner.

c) The costs incurred by the City to repair any damaged utility shall be paid by the Permittee.

12. STREET RESTORATION.

- a) Trenches shall be compacted to 95% density in accordance with AASHTO T-99 (or T-180, as appropriate). When the street cut is to be made in a collector or arterial street, an area of poor subgrade materials, or any other area requiring immediate closure and resurfacing of the street, non-shrink backfill, or imported structural backfill shall be used when directed by the Street Superintendent prior to resurfacing.
- b) Concrete curb, gutter and sidewalks shall be repaired according to City of Bozeman standards.
- c) All asphalt patches shall be made with hot mix asphalt within forty-eight hours of trench backfilling. The thickness of the asphalt patch shall be equal to or exceed that of the existing roadway but shall be no less than 3". In the event that hot mix asphalt is not available, cold mix asphalt may be used but shall be removed and replaced as soon as the local asphalt supplier company starts up the following construction season. The temporary cold mix patch shall be made within forty-eight hours of trench backfilling.
- d) Before the street cut patch is made, the existing asphalt shall be cut back a distance of one (1) foot on each side of the existing trench opening. The edge of the existing asphalt shall be tacked with SS-1 or equal prior to placing the new hot mix asphalt.
- e) All street cuts shall be covered by a one (1) year warranty period commencing upon final inspection and acceptance by the City and said warranty shall extend to the City.
- f) In the event the applicant fails to restore the street in a timely manner, the City reserves the right to have the work completed at the applicant's expense. If defects in the patch occur within the warranty period, the City reserves the right to repair the patch at the applicant's expense if the applicant fails to make the necessary repairs within five days of being notified.
- 13. **RUBBISH AND DEBRIS.** Upon completion of work allowed under this permit, all rubbish and debris shall be immediately removed from the right-of-way and the right-of-way and roadway restored and left in a neat and presentable condition satisfactory to the City.
- 14. <u>INSPECTION</u>. The City shall have the right to inspect all work covered under the scope of this permit. All work contemplated under this permit shall be done to the satisfaction of the authorized representative of the City, and the City hereby reserves the right to order the change of location or installation authorized by this permit at any time, said changes to be made at the sole expense of the Permittee.
- 15. CITY TO BE REIMBURSED FOR REPAIRING ROADWAY. Upon being billed therefore, Permittee agrees to promptly reimburse the City for any expense incurred in repairing surface of roadway due to settlement after installation, or for any other damage to

roadway, curb, gutter or sidewalk as a result of the work performed under this permit.

16. OTHER CONDITIONS AND/OR REMARKS.

a)	This permit is valid for a period of six months after the date of approval, unless other wise extended in writing by the Director of Public Service.
b)	One (1) lane of traffic shall be kept open at all times, (unless Street Closure and Traffic Control Plan has been approved).
c)	Other
<u>17</u>	POTENTIAL ASBESTOS ALONG WALLACE AVENUE
a)	In the event the proposed work is located on or immediately adjacent to Wallace Avenue south of Main Street (See Attached Exhibit D Potential Asbesto Along Wallace Avenue and Figure 1- Observed and Potential Asbestos Ore Map), the applicant shall fill out the attached Potential Asbestos Along Wallace Avenue form and hire a Montana Accredited Asbestos Contractor/Supervisor to inspect the excavation for the presence of asbestos-containing material. It shall be the applicant's responsibility to contact the City Engineer's office to ascertain whether such services are required and to hire an inspector with the appropriate credentials. It shall be a violation of the terms of the permit to fail to hire a Montana Accredited Asbestos Contractor/Supervisor if the applicant is excavating within the area delineated on the attached map.
b)	The Montana Accredited Asbestos Contractor/Supervisor must be present for the first day of excavation, and each additional day that a new area is excavated. Whether or not asbestos contaminated soil is encountered during the course of the proposed work, the applicant shall fill out the attached Potential Asbestos Along Wallace Avenue form, and submit this form to the City of Bozeman Street Department and the Montana Department of Environmental Quality within five days of completion of the inspection and/or asbestos removal activities.
c)	If any asbestos containing material is identified, a Montana Accredited Asbestos Abatement Contractor/Supervisor or Worker must immediately remove, transport and dispose of the asbestos in compliance with all applicable state and federal environmental requirements, criteria, and limitations, including OSHA regulations.
d)	Any contractor intending to conduct any work in the Wallace Avenue area delineated on the map must include a contingency for the discovery of asbestos within its work plan.
ED a	t Bozeman, Montana this day of , 2 .

The undersigned Permittee, mentioned in the foregoing instrument, hereby accepts this permit, and agrees to comply with all of the terms and conditions set forth herein.

PERMITTEE:	
Title:	
Street Cut Recommended by City Street Superintendent Date:	Application Approved by Public Service Director Date:
COMPLETED STREET CUT INSPE	CCTED BY:
Title	

Street Department Permittee Project File

cc:

EXHIBIT "A"

STREET CUT FEE SCHEDULE

All persons permitted to excavate or cut a paved public street or alley shall pay the following fees prior to approval of the street cut permit. Pavement degradation fees shall only be required for excavations in asphaltic concrete pavement; pavement degradation fees shall not be required for streets or alleys with Portland cement concrete surfaces or gravel surfaces.

The pavement degradation fee shall be determined by the actual area of the excavation plus an additional three (3) feet around the excavation.

Streets shall be considered "protected streets" for a period of five (5) years following initial construction, re-construction, or re-paving. In addition to the normal pavement degradation fee, a pavement degradation fee surcharge shall be required for any excavation in a protected street according to the following schedule. Seal-coating alone or similar maintenance treatments shall not make a street protected.

Application Fee: \$50.00

Pavement Degradation Fee: \$0.45/square foot

Pavement Degradation Fee Surcharges:

Age of Protected Street

0-1 year	\$2.70/square foot
1 - 2 years	\$2.25/square foot
2-3 years	\$1.80/square foot
3 – 4 years	\$1.35/square foot
4 – 5 years	\$0.90/square foot

EXHIBIT "B"

INSURANCE REQUIREMENTS

Any person requesting permission to excavate in any public right-of-way shall be required to provide documentation of the following minimum insurance coverages:

General Liability Insurance This insurance shall include coverage for collapse and underground (CU) hazard, explosions (X) coverage, and contractual liability.

Coverage	Minimum Limits of Liability	
Commercial General Liability	Each Occurrence:	\$1,000,000
	General Aggregate Limit:	\$2,000,000
	Products - Completed Oper-	
	ations Aggregate Limit:	\$2,000,000
	Personal & Advertising Injury:	\$1,000,000
	Fire Damage (any one fire):	\$ 50,000

<u>Automobile Liability Insurance</u> This insurance shall include coverage for owned, non-owned, and hired vehicles.

Coverage Minimum Limits of Liability

Business Automobile Liability Combined Single Limit: \$1,000,000

Worker's Compensation Insurance

State: Statutory Federal: Statutory

Employer's Liability: \$500,000

The City of Bozeman shall be named as additional insured on all required insurance coverages.

EXHIBIT "C"

STREET OPENING BOND PURSUANT TO SECTION 12.12.030 OF THE

MUNICIPAL CODE OF THE CITY BOZEMAN

KNOW ALL MEN BY 1	HESE PRESEN	IT, That we, the undersigned
virtue of the laws of the State of	 of	, a corporation organized and existing under and by, hereinafter referred to as the "EXCAVATION
CONTRACTOR," and	··	. a corporation organized
and existing under and by virtu	e of the laws of	the State of, and authorized to transact
business in the State of Monta	na, as Surety, ar	e held and firmly bound unto the CITY OF BOZEMAN, a
municipal corporation of the sta	ate of Montana, I	hereinafter referred to as the "CITY," in the penal sum of
	, (\$) lawful money of the United States of America,
for the payment of which sum,	well and truly to	be made, we bind ourselves and our heirs, executors,
administrators, successors and	assigns, jointly	and severally, firmly to these present:
THE CONDITION OF THE FO	REGOING OBLI	GATION IS SUCH THAT:
		I CONTRACTOR has on the day of, 20,
		pursuant to Bozeman Municipal Code Section 12.12.030 for
excavation work in public stree	t, alley or other	public property of the CTTY;
WHEREAS, execution of this b	ond is a condition	on precedent to the issuance of such permit:
		CONTRACTOR shall and will, in all particulars well and truly
		ach and every ordinance relating to excavating in the right-of-
		Rules and Regulations of the Department of Public Service,
according to the true intent and	i meaning in suc	en case; and
		ATION CONTRACTOR shall satisfy all claims and demands
		in the performance of any such excavation, and shall fully
		damages, claims, demands, expense and charge of every
		rising from any act, omission, or neglect of said EXCAVATION
		relation to any work performed under a permit; and shall fully nages and expenses which it may incur in making good any
		TION CONTRACTOR to fulfill its obligation to furnish
		all guarantee period provided in the ordinance, then this
		all remain in full force and effect.
This bond may be terminated a	at any time by the	e Surety upon sending notice in writing, by certified mail, to
		eman, with whom this bond is filed. After expiration of 30 days
		erminate and the Surety shall thereupon be released from any
liability, acts or omissions of the	e Principal subse	equent to said date.
		CONTRACTOR and Surety have executed these presents, as
of this day of	:	, 20
		EXCAVATION CONTRACTOR
ATTEST:	BY:	
	2	TITLE
SECRETARY		

	SURETY
BY:	
٥١.	ATTORNEY-IN-FACT

(Accompany this bond with Attorney-In-Fact's authority from the Surety to execute bond, certified to include the date of the bond.)

EXHIBIT D

POTENTIAL ASBESTOS ALONG WALLACE AVENUE

See Attached Map (Figure 1 – Observed and Potential Asbestos Ore)

This form is <u>only</u> for excavation along Wallace Avenue south of Main Street. For more information please contact the City Engineer's office.

You <u>must</u> submit a copy of this form <u>within 5 days</u> of completion of the inspection and/or asbestos removal activities to both the City of Bozeman Street Department and the Montana Department of Environmental Quality at the addresses listed immediately below:

City of Bozeman Public Service Department Street Division 814 North Bozeman Avenue Bozeman, MT 59771

Montana Department of Environmental Quality Attn: CMC Bozeman Asbestos Facility PO Box 200901 Helena, MT 59620-0901

Montana Accredited Asbestos Contractor/Supervisor Information:

Name:	
Mailing address:	
Telephone number:	
Accreditation Number:	
Accreditation Date:	
Date of excavation:	
Location of Excavation (please describe by nearest intersection and nearest building):	
Was asbestos ore found? Yes No	

If asbestos ore was found:
Approximate amount of asbestos material removed (cubic feet):
Areal extent of the excavation (square feet):
Depth to which asbestos contamination was found (feet):
Date removed:
Regulated asbestos-containing material transporter:
Contractor name:
Mailing address:
Telephone number:
Waste disposal Site:
Date disposed of:
Signatures:
Applicant
Montana Accredited Asbestos Contractor/Supervisor

